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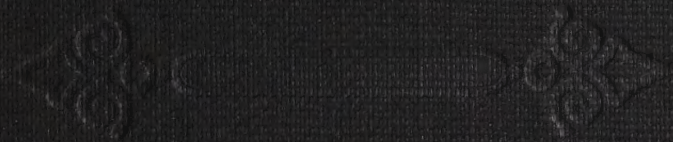
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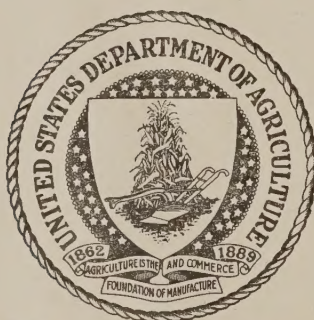
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UNITED STATES DEPARTMENT OF AGRICULTURE
WEATHER BUREAU

UNITED STATES
METEOROLOGICAL
YEARBOOK

1937



Issued as the Report of the Chief of the Weather Bureau prior to 1935

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FOREWORD

Prior to 1935 this publication constituted the statistical sections of the Annual Report of the Chief of the Weather Bureau. The practice of publishing annual meteorological statistics in a separate volume, entirely disassociated from the Annual Report of the Chief of the Weather Bureau, was inaugurated in 1935 to avoid some duplication in printing, but primarily to make printed meteorological matter more accessible to the public and to conform with similar publications of foreign nations.

The discussions and statistics presented herein concern principally the climatological phase of meteorology. Statistical data relating to the work of all the Divisions of the Weather Bureau are published currently in the Monthly Weather Review. From time to time special articles, based on the statistical data collected by the several Divisions of the Bureau, appear in the Monthly Weather Review and its supplements.

J. P. KOHLER, *Editor.*

GENERAL SUMMARY OF THE WEATHER CONDITIONS IN THE UNITED STATES DURING THE YEAR 1937

REVIEW OF THE WEATHER CONDITIONS DURING 1937

The outstanding event associated with the weather of the year was the great flood in the lower Ohio and Mississippi Valleys brought about by excessive rains in January over the drainage areas of the Ohio River and its tributaries, including the Wabash, the Cumberland, and the Tennessee. The monthly rainfall over the middle and southern portions of Ohio ranged consistently from above 9 inches to more than 14 inches. Over southern Indiana rainfall averaged 16.22 inches (12.20 inches above the average) and in southern Illinois 11.74 inches or more than 8 inches in excess of normal. Over central Tennessee monthly falls averaged more than 16 inches and in the western division about 18.50 inches. McKenzie, Tenn., reported 23.90 inches for the month, Earlington, Ky., 22.97, Hickory, Miss., 21.48, and Evans Landing, Ind., 21.39 inches; also monthly totals for Jeffersonville, Ind., and Leavenworth, Ind., were in excess of 20 inches. Many stations in southeastern Missouri and eastern Arkansas reported monthly totals in the neighborhood of 20 inches. A detailed discussion of rainfall over the various watersheds, river stages, and meteorological phenomena responsible for the heavy rains in the Ohio Valley during January appears in Supplement No. 37 of the MONTHLY WEATHER REVIEW.

Among other notable features of the year's weather were the severe cold of January throughout the Rocky Mountains, north-central Great Plains, and upper Mississippi Valley when mean State temperatures were the lowest of record in Washington, Oregon, California, Idaho, Nevada, Utah, Arizona, Montana, Wyoming, Colorado, and New Mexico, and the lowest of January record in the Dakotas and Nebraska, and the exceptionally warm January weather in the southeastern States, particularly in Alabama, which advanced vegetation, especially fruit, to premature stages only to be severely damaged by cold weather during March. Other features were low January temperatures in California which resulted in two destructive freezes, the backward spring weather in the northern Rockies and northern Plains States, the unusually dry spring in Montana and in the north and central Plains which was followed by the most devastating drought ever known in the extreme northeastern counties of Montana.

Drought conditions that were record breaking prevailed over Kansas almost throughout 1937; the year's moisture was deficient in every county, except those in the southeastern quarter. Near the close of the year the lack of normal rainfall in late summer and early fall months seriously hampered plowing and seeding of late grains in the northern portions of the Missouri and Mississippi Valleys.

Another notable, but desirable, feature of the year's weather was the marked freedom from destructive storms such as tornadoes which entailed great loss of life and property in the spring months of 1936, especially in the Southeastern States.

Notwithstanding the extremely low temperatures in the western half of the country during January, the year 1937 averaged 0.7° above normal. Table 1 shows, indirectly, that the mean temperatures in practically all districts averaged close to normal. Only one district, the upper Mississippi Valley, averaged below-normal warmth. The Ohio Valley and Tennessee district was exactly normal while in all other sections the annual mean temperature was above normal, but generally not more than 1° , except that in the Atlantic coast regions, and sections bordering on the Pacific Ocean, departures ranged from 1° to 2° above normal. In 1936 the upper Lake region was the only section with below-normal warmth, while in the remaining districts departures were positive and generally considerably greater as compared to 1937.

The relatively warmest section for the year was the New England district which averaged 2° above normal. The relatively warmest month was August with a departure of 3.3° . May, June, July, and September were also considerably warmer than normal and February, October, November, and December averaged slightly above normal. Only 3 months—January, March, and April for the country as a whole—averaged subnormal warmth; January was the relatively

coldest month with a negative departure from normal of 2.1°. Close examination of Table 1 shows that January was characterized by marked contrasting temperature conditions in different portions of the country. Decidedly above-normal warmth prevailed in the Northeast and Ohio Valley and Tennessee while west of the Mississippi River and the Lake region temperatures, especially in the Plateau and Rocky Mountain districts, were markedly below normal. Deviations from the normal by districts during the remaining months of the year were much less marked, except that during August excessive warmth prevailed in North Dakota, the upper Mississippi Valley, and middle slope districts.

TABLE 1.—*Monthly and annual mean temperature departures, 1937*

[Compiled from "Table 2.—Climatological Data for Weather Bureau Stations" contained in the 12 issues of the REVIEW during 1937]

Districts	January	February	March	April	May	June	July	August	September	October	November	December	Annual
New England.....	+9.3	+5.5	-1.5	-0.1	+2.5	+1.0	+1.7	+4.8	+0.1	+0.8	+2.1	-0.6	+2.0
Middle Atlantic.....	+9.6	+2.1	-1.8	-.3	+1.7	+1.9	+7	+2.7	-1.9	-2.0	+4	-.0	+1.1
South Atlantic.....	+11.3	-.4	-.7	-.2	+6	+2.4	+3	+1.2	-.7	-2.4	-2.1	-1.6	+6
Florida Peninsula.....	+9.5	+1.6	-1.0	+2	+2	+8	+1	+4	+3	-.7	-1.7	-1.7	+7
East Gulf.....	+11.3	-.8	-3.0	-.2	+1.5	+1.8	.0	+1.0	-.9	-2.3	-3.5	-.9	+3
West Gulf.....	-.2	+4	-4.5	.0	+1.4	+1.8	+1	+2.5	+1.2	+6	-2.5	-.3	+1
Ohio Valley and Tennessee.....	+8.2	-.4	-3.3	-.4	+2	+1.4	-.4	+3.0	-1.6	-3.0	-2.5	-1.8	.0
Lower Lakes.....	+7.8	+3.6	-3.2	-.2	+8	+2	+1.2	+4.4	-1.2	-2.7	+1	-1.8	+8
Upper Lakes.....	+1.9	+3.1	-1.3	-.2	+1.9	+6	+2.3	+5.7	+3	-2.7	-.4	-2.0	+8
North Dakota.....	-12.6	-1.4	+1.7	-.1	+3.4	+1.1	+3.7	+7.4	+1.6	+9	-1.1	-.7	+3
Upper Mississippi Valley.....	-2.3	-.9	-1.7	-1.0	+1.5	+1	+1.9	+5.7	+9	-1.7	-2.4	-1.9	-.2
Missouri Valley.....	-8.2	-.7	-1.4	-.8	+2.9	+1.1	+3.6	+7.6	+2.6	-.3	-2.1	-.5	+3
Northern Slope.....	-16.6	-.9	+3	.0	+3.6	+4	+3.9	+3.6	+3.8	+4.5	+1.1	+1.3	+4
Middle Slope.....	-8.2	+3	-3.0	+4	+3.1	+1.0	+3.3	+6.2	+2.5	+1.1	-1.2	-.4	+4
Southern Slope.....	-3.0	+1.6	-4.2	+1.3	+1.8	+1.5	+1.7	+4.5	+3.1	+2.8	-.4	+1	+9
Southern Plateau.....	-6.7	-1.6	-1.8	.0	+2.9	+4	+1.5	+3.6	+3.8	+2.9	+3.0	+4.2	+1.1
Middle Plateau.....	-15.8	-3.1	+7	-1.9	+4.8	+6	+2.6	+2.4	+3.8	+2.9	+4.1	+4.7	+5
Northern Plateau.....	-15.1	-2.9	+1.6	-2.2	+2.5	+5	+3.8	-.3	+4.0	+5.1	+4.0	+4.9	+5
North Pacific.....	-7.9	-.3	+2.6	-1.2	+1.4	+2.6	+1.4	+2	+1.8	+4.6	+3.4	+2.8	+1.0
Middle Pacific.....	-10.3	-2.8	+4	-1.3	+1.7	+1.8	+1.9	+1.6	+1.2	+2.4	+1.8	+3.9	+2
South Pacific.....	-5.8	-.3	+7	+1.4	+2.2	+7	+1.2	+7	+2.5	+2.4	+1.3	+4.7	+1.0
United States.....	-2.1	+8	-1.2	-.3	+2.0	+1.1	+1.8	+3.3	+1.3	+6	+1	+6	+1.7

* Mean of the monthly values.

During the past year, although precipitation was not normal over a large interior section, and July and August were comparatively hot, it was a decided improvement over conditions which existed in 1936. On a State average basis only 5 States west of the Mississippi River, viz., Texas, Arizona, Colorado, Utah, and Nevada, had less annual rainfall than in 1936. All States which suffered severely from the lack of rainfall in 1936 received in 1937 substantial increases apart from small gains, 10 percent or less, in Iowa, Kansas, and Montana. East of the Mississippi River and the Lake region the annual rainfall, without exception, averaged above normal, as well as in the Pacific Coast States.

Table 2 shows that for the United States as a whole precipitation averaged 0.3 inch in excess of normal or about 2.0 inches above the corresponding 1936 figure. In 10 of the 21 climatological districts, comprising the area westward from the upper Lakes to the northern slope and southward to the Mexican border and west Gulf district, there was a decided shortage in rainfall. The relatively driest sections were the Missouri Valley and middle and southern slope districts (in 1936, 14 sections received less-than-normal precipitation). Annual averages were decidedly in excess of normal in the Atlantic coast and east Gulf sections and also in the north and middle Pacific districts, the middle Pacific district (principally northern California) being the relatively wettest with an excess of 8.8 inches.

On a monthly basis variations from normal precipitation were equally divided. January, February, April, June, October, and November received above-normal amounts. January was by far the wettest month with an excess of 0.9 inch and May the relatively driest with a deficiency of 0.6 inch.

Chart 4, page 142, based on data from approximately 5,000 regular and cooperative Weather Bureau stations shows the yearly distribution of precipitation with respect to normal. There appears a large area of decidedly deficient rainfall over the southern and central Great Plains area northeastward to the Great Lakes, with a small area of marked shortage of moisture along the West Gulf coast and immediate interior. Areas of markedly above-normal rainfall prevailed east of the Mississippi River and the Lake region and in the North and Middle Pacific Coast States. The largest yearly excess reported from a first-order station was 29.73 inches at

Pensacola, Fla.; New Orleans, La., had 21.94 inches in excess of the yearly normal. Similarly, the greatest shortage reported was 14.12 inches at Topeka, Kans., and Kansas City, Mo., was close with 12.27 inches below annual normal rainfall.

TABLE 2.—*Precipitation departures, monthly and annual, 1937*

[Compiled from "Table 2—Climatological Data for Weather Bureau Stations" contained in the 12 issues of the REVIEW during 1937]

Districts	January	February	March	April	May	June	July	August	September	October	November	December	Sum
New England.....	+0.6	-1.3	-0.1	+1.0	+0.4	+1.2	-1.3	+0.7	+0.1	+1.1	+1.5	-0.5	+3.4
Middle Atlantic.....	+2.8	-.7	-1.2	+1.6	-.7	+1.1	-.9	+1.8	-.8	+2.7	+7	-1.9	+4.5
South Atlantic.....	+1.6	+3	-1.6	+2.7	-1.3	-.3	+7	.0	-1.2	+1.2	+4	-1.4	+1.1
Florida Peninsula.....	-1.1	+4.2	+1.7	-.3	+6	-1.0	+6	-.2	+1.1	-.6	+7	-1.2	+4.5
East Gulf.....	+2.5	.0	-.8	+3.1	-.4	.0	-1.8	+1.1	-.1	+4.8	-.8	-2.3	+5.3
West Gulf.....	+1.7	-1.5	+6	-2.4	-1.8	-.3	-8	-.7	-7	+5	+5	+2.4	-2.5
Ohio Valley and Tennessee.....	+8.3	-1.2	-2.5	+5	-.1	+3	-.2	+4	-.9	+2.1	-1.5	-.2	+5.0
Lower Lakes.....	+2.1	-.4	-.7	+1.7	-.4	+2.8	-.2	+7	-1.2	+1.0	-.8	-.4	+4.2
Upper Lakes.....	+6	+1	-1.4	+1.1	-1.2	-.2	-.4	-.5	+4	-.1	-.1	-.6	-2.3
North Dakota.....	+3	.0	-.5	+1.0	-.8	-.6	+3	-.2	-.1	-.5	-.3	.0	-1.4
Upper Mississippi Valley.....	+2.5	-.2	-.9	+8	-.2	-.2	-1.2	-1.1	-1.4	+2	-.8	-.1	-2.6
Missouri Valley.....	+1.4	-.8	-2	-.4	-1.1	-.5	-.6	-.8	-2.0	-.8	-.5	-.3	-6.6
Northern Slope.....	.0	-.1	+3	-.4	-1.1	+2	+4	-.6	-.4	-.3	-.2	+3	-1.9
Middle Slope.....	+4	-.4	+2	-1.2	-1.4	-.2	-.6	-.9	-.7	-.6	-.2	-.2	-5.8
Southern Slope.....	-.3	-.6	+3	-1.0	+6	-.8	-1.5	-1.2	-.5	-.6	-.4	+1.0	-5.0
Southern Plateau.....	+1	+2	+4	-.4	+5	+7	-.7	-.8	+4	-.1	-.6	-.2	-.5
Middle Plateau.....	+3	.0	+2	-.3	+3	+.4	+5	-.3	-.2	-.3	+1	+4	-.3
Northern Plateau.....	-.1	-.2	+2	+7	-1.0	+5	-.1	-.2	-.3	-.2	+7	+2	+2
North Pacific.....	-2.9	+1.1	-1.1	+2.8	-.7	+1.9	-.4	+6	-.2	-.2	+3.4	+1.0	+5.3
Middle Pacific.....	-1.8	+1.2	+3.5	+5	-1.0	+8	.0	.0	-.6	+9	+3.9	+4	+8.8
South Pacific.....	-.5	+2.7	+1.0	-.7	-.2	-.1	.0	.0	-.2	-.6	-.9	+6	+1.1
United States.....	+9	+1	-.1	+5	-.6	+2	-.4	-.1	-.5	+5	+2	-.2	¹ +3

¹ Sum of the 12 monthly values.

Temperature extremes during the year were well within the limits of previous records. The highest maximum reported was 124° at Greenland Ranch, California, on August 11, 12, and 13 and at Cow Creek, Calif., on the 12th. The lowest temperature reported was -56° at West Yellowstone, Wyo., on January 21. Temperatures of freezing or below occurred in every State some time during the 12 months. July brought minima of freezing or below to 12 States and August brought similar minima to 10 States. The lowest for July was 20° at Austin, Oreg., on the 8th; and that for August was 13° at Seneca, Oreg., on the 28th.

The greatest annual precipitation recorded at any station in the United States during the year was 168.88 inches at Valsetz, Oreg., elevation, 1,150 feet; this station also reported the greatest monthly amount in the United States, 35.96 inches in December. During the year 1,204 stations experienced at least 1 month with no precipitation and 66 stations had months with totals of less than 0.01 inch.

JANUARY

January 1937 was characterized by marked extremes of weather conditions in different portions of the country. The outstanding features were the heavy rains and disastrous floods in the Ohio Valley and the two severe freezes in the far West, especially in the southern half of California.

The month had abnormally warm weather east of the Mississippi River and severely low temperatures in most western sections, the dividing line between the cold and warm areas conforming roughly to the Mississippi River. In the Eastern States the monthly mean temperatures ranged generally from 10° to 14° above normal, making it one of the warmest Januaries of record. On the other hand, from the central and northern Great Plains westward, the deficiencies in temperature were equally marked, ranging from 10° to as many as 20°. For the month as a whole the relatively coldest weather occurred in the northern Plains, the northern Rocky Mountains, and the Great Basin of the West.

Except in the extreme South, and locally in the Northeast, January was abnormally wet over the entire eastern half of the country, the heavier rains culminating in the Ohio and central Mississippi Valleys, where, over considerable areas, from three to more than four times the normal occurred. These rains resulted in one of the most disastrous floods ever experienced in this country.

In the West relatively heavy precipitation occurred in the Great Basin and in central California, but elsewhere the monthly totals were generally below normal. The far Northwest had a

little more than half the normal amount, while the southwestern Plains, from eastern Colorado southward and southeastward, continued dry, with some stations reporting less than one-fourth the normal precipitation. Also, the extreme Southeast had but scanty rainfall.

FEBRUARY

The month of February was characterized by moderate temperatures for the season rather generally over the country and wide variations in precipitation. Abnormal warmth prevailed in most of the Lake region and the Northeast, but in other sections east of the Rocky Mountains the mean temperatures were very near normal. In fact, an unusually large number of stations reported approximately normal temperature for the month, and practically everywhere the monthly mean departures from normal ranged from 1° or 2° plus to 1° or 2° minus. West of the Rocky Mountains the averages were moderately low for the season in most of the Great Basin and upper Rocky Mountain sections, but minus departures from normal were rather marked in northern California.

Precipitation was abnormally heavy in most sections from the Rocky Mountains westward, and also in the more Southeastern States and central-northern districts. Elsewhere, the amounts were deficient, with very little over considerable trans-Mississippi areas. The boundaries between sections of comparatively heavy precipitation and others of scanty amounts were sharply drawn in many places. In the far West the relatively heaviest falls occurred in southern California, where the month had more than twice the normal precipitation. Also, in the region just west of the Great Lakes, substantially more than normal occurred, ranging up to above twice the normal locally. Heavy rains occurred in some Southeastern States, Tampa, Fla., for example, having more than four times the normal for the month.

On the other hand, the interior valleys generally were relatively dry. In marked contrast to January, February in the Ohio Valley had only about half the normal rainfall, while a large southwestern area, including Oklahoma and much of Texas, had less than one-fourth the normal. In general, the western Great Plains had decidedly scanty precipitation, with some sections receiving less than one-fourth the normal amount.

For the three winter months ending with February, December and February had generally moderate temperatures, with a tendency to above normal in most sections, while January was decidedly warm in the eastern third of the country and extremely cold in most of the West and Northwest. December had moderate temperatures to abnormally warm weather for the season in all sections of the country, with the interior States considerably warmer than normal. January was characterized by marked extremes in temperature, being one of the warmest months of record in the Eastern States and extremely cold in the West and Northwest, while February had about-normal warmth in nearly all areas.

MARCH

In general, the month of March 1937 was cooler than normal east of the Rocky Mountains and warmer than normal in the far West. East of the Great Plains the general tendency was to scanty precipitation, but above normal was the rule to the westward.

About-normal warmth prevailed along the Atlantic coast and in the Great Basin of the West, but the temperature averaged considerably above normal locally in the northern Great Plains and the north Pacific area. The largest minus departures occurred from the lower Mississippi Valley westward to New Mexico, where the monthly means were from 4° to 6° subnormal. Relatively low temperatures were experienced also from West Virginia northward, in parts of the Ohio Valley, and in some upper Rocky Mountain sections. The largest plus departures occurred over the interior of the Pacific Northwest, where the month was 4° to 7° warmer than normal.

A wide belt extending from the middle Atlantic area westward over the Ohio and Mississippi Valleys to the eastern Great Plains had scanty precipitation during the month, with some districts receiving only about one-fourth of the normal amount. In the Ohio Valley, where rainfall was excessive in January, February had but little more than half the normal, and March was even drier.

In the Great Plains States the falls were decidedly irregular, being much above normal from eastern Wyoming and Nebraska southward and decidedly below normal in the more northern sections. West of the Rocky Mountains most districts had above-normal precipitation, especially California and the Southwest, where many stations reported more than twice the normal amount for the month.

APRIL

The month of April was characterized by seasonable temperatures in nearly all sections of the country, with above-normal rainfall rather generally east of the Mississippi River and subnormal amounts over the far Southwest and most of the Great Plains; in fact, temperatures averaged remarkably near normal practically everywhere. East of the Rocky Mountains most stations had monthly means differing only 1° or less from the normal for the month, ranging generally from about 1° below normal to 1° above. West of the Rocky Mountains temperatures averaged somewhat subnormal in the Great Basin, although the deficiencies were generally not greater than 2° or 3° .

Precipitation during April varied greatly in different areas. The monthly totals were above normal rather generally from the central and lower Missouri Valley eastward and also in central and eastern Gulf districts and the Atlantic States. The relatively heaviest falls occurred in the Atlantic States from the Carolinas northward to Pennsylvania, where some sections had more than twice the normal for the month. Precipitation was relatively heavy, also, in the far Northwest. On the other hand, a large southwestern area had very little rain, while in much of the western plains, as in March, the amounts were again scanty, being less than one-third of normal over a considerable southwestern area.

During the 3 months ending with April, precipitation was above normal in most places from Florida and the east Gulf sections northeastward, in the upper Mississippi Valley, and rather generally from the Rocky Mountains westward. Most other areas had less than normal, the amounts being decidedly below from Texas northward to Nebraska and western South Dakota. Much of the Ohio Valley received from slightly more than half to about three-fourths of normal during this 3-month period.

MAY

Temperature during the month of May 1937 averaged predominantly above normal values over practically the entire country. The eastern Ohio Valley, a small portion along the coast of North Carolina, and extreme northwestern Washington reported temperatures subnormal by margins ranging up to 1° . Elsewhere, positive departures from normal obtained, generally ranging from 1° to 3° , except generally 3° to 6° in the North and Central Plains States, the Great Basin area, and interior California.

In contrast to temperature conditions, rainfall for this month was below normal over much of the greater portion of the country with only a few States having normal or above. In the Ohio Valley the percentages varied from 78 percent in Illinois to 100 percent in Ohio, and in the Mississippi Valley from about 70 percent in the extreme South to considerably above normal in the extreme North. In the Plains States from North Dakota southward, percent of normal figures varied from 62 percent in Texas to 94 percent in Oklahoma with the northern Plains running around three-fourths of normal. Montana had the scantiest rainfall with only one-fourth of normal, while New Mexico had more than $2\frac{1}{2}$ times the normal for the month.

From the Mississippi Valley eastward and in the northern Great Plains, except Montana, there was much more precipitation in May 1937 than for the same month in 1936. Oklahoma had approximately the same amount as last year, but Kansas and Texas had considerably more rain in May of last year than this year.

JUNE

In midwestern sections the first half of June was decidedly cool and the last half abnormally warm, making the monthly average near normal. Precipitation was substantial to heavy in many sections of the country, though the amounts were scanty in some limited areas. For the country as a whole the tendency was for seasonal temperatures and above-normal rainfall in most sections.

Temperature for June averaged remarkably near normal practically everywhere, with the majority of stations reporting monthly means from 1° to 2° above normal. In fact, the average temperatures for the month were generally within 2° of normal, except in very limited areas—the uniformly near-normal temperature, country-wide, was a very unusual occurrence.

While limited areas had scanty precipitation, rainfall was near normal to considerably above in most sections. The lower Mississippi Valley and some adjoining sections, the middle and lower Rio Grande Valley, the Great Basin of the West, and parts of the Great Plains had much below-normal amounts. On the other hand, from the Ohio Valley northeastward the monthly totals were decidedly above normal and unusually heavy rains occurred in the far Northwest. In some sections of the latter area the heaviest June rainfall of record was reported, the amounts running, locally, as high as four to five times the normal for the month. For June 1936 nearly all interior sections of the country had from less than one-fourth to only about one-half the normal rainfall.

JULY

The month of July 1937 was characterized by moderate temperatures over the southern and the eastern portions of the country, abnormally warm weather in central and northern Midwestern States, and very unevenly distributed rainfall over the principal agricultural sections of the country.

The average temperature for the month was near normal throughout the Cotton Belt and in Central and Northern States east of the Mississippi River, the monthly means in these areas ranging mostly from about 1° below normal to 1° or 2° above. On the other hand, over the Great Plains the monthly means ranged generally from 3° to 6° above normal; while moderate plus departures obtained in most western sections of the country, they were rather large in the Great Basin and northern Rocky Mountain area.

The general tendency was for moderate dryness to scanty rainfall rather generally east of the Rocky Mountains, though some restricted areas received monthly totals decidedly in excess of normal. Rainfall variations were often in marked contrast in contiguous localities, such as heavy rains in extreme northern Missouri and southern Iowa and very scanty amounts in northern Iowa, southern Minnesota, and some adjoining sections. The Southwest had a decidedly dry month, with less than 25 percent of normal rainfall in parts of Oklahoma and Texas. In the Atlantic States the falls ranged from moderately below normal to somewhat above normal rather generally.

The relatively greatest rainfall occurred from eastern Montana and Wyoming southwestward, where the monthly totals ranged up to four times the normal locally and more than twice the normal over considerable areas. However, to the northwest of this belt there was very little precipitation, totals ranging down to less than half the normal in the interior of the Pacific Northwest.

AUGUST

Temperatures during August continued the general trend so consistently followed in the 3 preceding months, except for minus departures of 1° to 2° in eastern Washington, extreme eastern Oregon, and in sections along the Alabama and Florida border; elsewhere positive departures obtained.

Averages generally exceeded normal values by 2° to 4° in the Atlantic Coast States, Gulf sections, and in the Rocky Mountain and Plateau States, while in the interior districts departures from normal were considerably greater, reaching 8° to 11° in the Dakotas, Nebraska, and western Iowa.

Precipitation for the month considered on the percentage of normal State basis was considerably above normal in the Atlantic Coast States, particularly in the middle Atlantic sections where the averages were from 60 percent to nearly 85 percent above normal. Elsewhere east of the Mississippi River, the amounts were close to normal, except in the western Ohio Valley and in Wisconsin, with Illinois reporting only 73 percent of the usual rainfall for August and Wisconsin only 84 percent. The upper Mississippi Valley sections were above normal, as was the Pacific Northwest, but the central and northern Great Plains, northern Rocky Mountain sections, and the Great Basin, as well as California had amounts that ranged from 35 to 90 percent less than usual. The western Great Basin and California, reported only 20 and 10 percent, respectively, of the usual amounts for this month. The lower Rocky Mountain region and immediate Southwest had from 64 to 76 percent of the normal rainfall.

SEPTEMBER

The month of September was somewhat cooler than normal in practically all parts of the country east of the Mississippi Valley, particularly in the Ohio Valley and some middle Atlantic sections, where the month was from 2° to 3° cooler than usual. It was slightly warmer in the Florida Peninsula and quite generally from the Mississippi Valley westward, especially in the Great Basin and adjoining districts where the month averaged 4° to 5° warmer than normal. It was also warm in the central Great Plains, with the plus departures ranging from 3° to 4° , while the averages were also high in northwestern Texas.

Monthly rainfall was greater than normal on the north Atlantic coast and locally in the Middle Atlantic section, as well as in the southern Mississippi Valley and northern Lake region. Precipitation was quite deficient in parts of the Southeast, extending to the southern Ohio Valley, with amounts in this area averaging less than half of normal and locally less than one-fourth of normal. It was also dry in much of Pennsylvania and western New York. Large central valley areas, as well as the western Great Plains and southern Texas, were very dry for the season, with many stations in these regions reporting less than half of normal and some less than one-fourth of normal; Kansas City, Mo., reported only 5 percent of the usual rainfall for September. In the

northern Great Plains, northwestern Texas, eastern New Mexico, and parts of the Southwest and Northwest, the amounts were above normal, while much of the Great Basin and the Southwest had less than half of the usual rainfall for September.

OCTOBER

October averaged moderately cool over the eastern half of the country and abnormally warm over much of the western half. East of the Great Plains the monthly mean temperatures ranged from about 1° to 3° or 4° subnormal generally, the greatest departures appearing in the area from the Lake region southward. West of the Plains temperatures averaged from about 1° above normal to as much as 7° above, the relatively warmest weather being in the far northwest portion of the country.

Except in a few limited areas, the month was much wetter than normal from the Mississippi Valley eastward, with some sections having from two to three times the normal amount. The heaviest precipitation occurred over a narrow belt extending from southeastern Pennsylvania and eastern Maryland southwestward to the extreme lower Mississippi Valley. The extreme Southeast and much of the Lake region had less-than-normal precipitation for the month.

West of the Mississippi Valley, distribution was very irregular. In parts of Texas, southern New Mexico, and locally in the central, northern, and northwestern Great Plains moisture was comparatively abundant, but a considerable central-northern area had an extremely dry month, with portions of the Dakotas having less than one-fourth the normal.

West of the Rocky Mountains the general tendency was to dryness. Northern California and a few other localities had about-normal precipitation or above, but in a considerable southwestern area, extending from central and southern California eastward over Arizona, there was very little moisture; a number of localities reported no rain whatever for the entire month.

NOVEMBER

November temperature averaged moderately cooler than normal east of the Rocky Mountains and Plateau States, except slightly above in the New England States, eastern Pennsylvania, and locally in the northern lower and eastern upper portions of Michigan. The range of negative departures was generally from 2° to 3° , with local deficiencies of as much as 5° to 6° in sections of the Missouri, central Mississippi, and western Ohio Valleys. In the far Western States and on the Pacific coast, mean temperatures generally exceeded the normals by 3° to 6° .

Monthly precipitation totals were generally considerably below normal in most States. The Atlantic Coast States, (except Georgia) Mississippi, Arkansas, 3 Pacific Coast States, Idaho, Nevada, and Wyoming, had above-normal amounts. In the remaining unnamed States deficiencies prevailed. Percentage of normal precipitation in the Eastern States ranged from 108 percent in New York and 145 percent in New England to 199 percent in Florida, while in the West, Washington had 163 percent of normal, Oregon 170 percent, and California and Idaho greater than 140 percent. Iowa and South Dakota had slightly less than 50 percent of normal rainfall, Nebraska 27 percent, and Arizona and New Mexico 10 and 18 percent, respectively.

DECEMBER

December was somewhat warmer than normal in the far Western States, while east of the Rockies temperatures generally averaged below normal by 1° to 3° . Locally in southeastern Texas and along the immediate north Atlantic coast, normal or slightly above-normal temperatures prevailed.

Precipitation in the eastern part of the United States was predominantly subnormal. Ohio was the only State to the eastward of the Mississippi River with more than normal precipitation. Some Atlantic coast sections, particularly Florida, Georgia, Virginia, Maryland, Delaware, and New Jersey, averaged decidedly subnormal. Most of the Lake region and Gulf States, New Mexico, a large Great Plains area, and several States in the upper Mississippi Valley were drier than normal. Nebraska averaged only 42 percent of the normal monthly fall; in November, the percentage was 27.

Large precipitation excesses were reported in Texas and portions of the Rocky Mountain region and far West; Texas had nearly twice the normal December fall and heavy rains in California and Idaho brought the State averages to more than one and one-half times the normal. In California rains were heavy during the week ending December 14, with Redding reporting a total of 8.2 inches; moderate to locally excessive rains occurred throughout the Pacific coast during this period.

The following week brought heavy precipitation to a wide belt reaching northeastward from the west Gulf area over the central Mississippi and Ohio Valleys to New England; portions of

Texas had as much as 5 inches. During the last week some very heavy rains occurred in the extreme Northwest; Portland, Oreg., reported 4.46 inches in 24 hours on the 26-27th, and Seattle, Wash., 3.06 inches on the 27-28th; weekly totals at these two stations were 5.8 and 4.9 inches, respectively.

PRECIPITATION FOR THE YEAR 1937

Precipitation for the year 1937 (State averages) was generally above normal east of the Mississippi River, except for portions of the eastern, middle, and upper Mississippi Valley and the Lake region. Fourteen States averaged below normal for the year; the greatest lack was found in Nebraska where the total was only 75 percent of the normal annual fall; the greatest excess, 133 percent of normal, was reported in Oregon.

As in both 1934 and 1936, a wide belt reaching from the southern Great Plains northward to the Canadian border and including Montana, Colorado, Iowa, Missouri, and Illinois, had subnormal rainfall. Texas, Arizona, and Nevada were the only States below normal in 1937 that were above in 1936. Totals for the year just ended averaged from 10 percent to as much as 48 percent greater than in the preceding year over large central and northern areas. In 1934 and 1936 the drought area centered over the northern Great Plains with North Dakota reporting the lowest percent of normal, 54 and 51 percent, respectively. In both these years Nebraska averaged 61 percent of normal; in 1937 North Dakota had 99 percent of normal, an increase of nearly 50 percent, while Nebraska received only three-fourths of the normal yearly rainfall.

Except for the far Northwest, and portions of California, where unusually heavy rains occurred late in the year, the most outstanding precipitation fell in the Ohio Valley and the Southeast, culminating in the great Ohio River flood of January, during which new high-water marks were set in several States.

Some of the heaviest monthly falls recorded during the year were reported in Hawaii, where one station, Piiponua, had 95 inches during the months of January and November; in the United States, particularly in the elevated regions of the West and in the Southeast, there were heavy falls. Among these may be mentioned McKenzie, Tenn., 23.90 inches in January; McNamers, Oreg., 23.45 in February; Big Four, Wash., 19.68 in April; Norwich, Kans., 12.88 in May; Paradis, La., 16.75 in June; Clearwater, Fla., 22.31 in July; Davie, Fla., 21.28 in August; Belle Chasse, La., 29.04 in October; and Valsetz, Oreg., 33.03 inches in November.

The year closed with insufficient subsoil moisture in much of the central Great Plains. Snowfall storage in the higher mountain sections of the West was generally deficient and supplies for spring run-off were considerably below normal in many Western States.

Table 3, below, shows the distribution of annual rainfall in percent of normal for the 42 climatic sections in the United States for the last 7 years.

TABLE 3.—Percentage of normal precipitation by States

State or region	1931	1932	1933	1934	1935	1936	1937	State or region	1931	1932	1933	1934	1935	1936	1937
Alabama.....	81	121	91	104	93	113	111	Nevada.....	89	92	75	79	96	116	101
Arizona.....	144	100	86	78	112	103	99	New England.....	99	105	107	103	93	119	114
Arkansas.....	97	105	101	88	117	72	114	New Jersey.....	81	103	109	99	93	105	105
California.....	103	66	86	76	94	111	123	New Mexico.....	126	112	88	70	102	94	104
Colorado.....	85	86	92	66	96	98	88	New York.....	97	108	96	90	97	103	112
Florida.....	83	100	106	101	99	109	111	North Carolina.....	88	105	79	108	97	121	107
Georgia.....	74	114	84	96	90	118	106	North Dakota.....	87	99	77	55	105	52	99
Idaho.....	83	111	100	89	72	96	116	Ohio.....	99	97	99	70	104	88	117
Illinois.....	102	98	94	88	112	82	99	Oklahoma.....	96	104	93	84	112	67	85
Indiana.....	97	108	103	75	100	86	117	Oregon.....	94	102	108	99	78	89	133
Iowa.....	112	102	79	85	105	82	87	Pennsylvania.....	88	92	107	92	95	100	110
Kansas.....	97	89	83	74	106	69	78	South Carolina.....	78	113	75	95	89	122	109
Kentucky.....	92	97	111	81	126	83	109	South Dakota.....	73	96	76	66	85	58	86
Louisiana.....	94	112	98	106	102	82	106	Tennessee.....	86	119	102	95	100	95	112
Maryland-Delaware.....	94	115	120	112	116	107	126	Texas.....	95	110	84	87	121	102	87
Michigan.....	97	108	99	83	93	89	101	Utah.....	79	105	83	74	85	132	115
Minnesota.....	89	86	83	80	102	73	102	Virginia.....	91	107	95	110	112	109	128
Mississippi.....	98	127	94	100	96	84	104	Washington.....	121	127	136	110	84	93	125
Missouri.....	100	94	90	85	118	73	93	West Virginia.....	99	102	113	87	119	98	116
Montana.....	66	106	103	73	71	75	85	Wisconsin.....	98	83	89	100	100	84	90
Nebraska.....	83	89	85	61	97	62	75	Wyoming.....	82	95	87	78	87	94	110

TORNADOES, 1937

In accordance with the practice established in 1916 and pursued each year thereafter, the tornadoes of 1937 are individually described in table 7, page 13. In particular, the form of presentation groups the tornadoes by States in alphabetical order, with the several tornadoes of each State arranged chronologically. The information has been furnished chiefly by the section

directors of the Bureau, consequently descriptions of practically all tornadoes have previously appeared in print in the monthly section reports or were listed in the Monthly Weather Review's table, Severe Local Storms.

Owing to the receipt of additional information and sufficient time to study more closely the violent storms which occurred, some difference in detail and number for the year will be found as compared with the rather abbreviated summaries contained in the several monthly issues of the Weather Review and the annual resume found in the December issue.¹

The result of later and more intensive considerations is the addition of a considerable number of tornadoes, some formerly overlooked or cataloged as nontornadic. In addition one or two storms previously classified as tornadoes are omitted from the accompanying compilation, but are included, however, in the table of windstorms other than tornadoes.

GENERAL SYNOPSIS

During 1937 there were 148 tornadoes in 34 States. None occurred in Hawaii, Puerto Rico, District of Columbia, the Virgin Islands, or Alaska; however, a small waterspout was observed about noon, August 1, off Dillingham, Alaska. The latter disturbance is not included in tables 4, 5, and 6. The 1937 figure (148) is 11 less than the 1936 figure (159) and ranks ninth in order of greatest frequency since 1916. As compared to normal (average for the period 1916-37) the number of tornadoes for 1937 exceeds the average by 11.

About 60 percent of these disturbances occurred in the months of April, May, and June; during June, the month with the greatest number, there were 46, while May had 34 and April 23. The greatest monthly frequency in the preceding year numbered 32, during May. Tornadoes were reported somewhere in the United States in all months, except January and December. The monthly frequency for the remaining months of 1937 was: February, 13; March 5; July, 10; August, 5; September, 4; October, 7, and November, 1.

The total loss of life attributed to tornadoes during 1937 numbered 29, which, fortunately, was far below the 1936 figure of 552 and is the lowest annual loss of life resulting from tornadoes since systematic records were begun in 1916; the year 1931 ranks second lowest with 36 deaths. During March 8 deaths were attributed to tornadoes, 9 in April, 3 in May, 8 in June, and 1 in August, while in February, July, September, October, and November tornadoes occurred without a single death. In most cases deaths were caused by flying debris or collapsing buildings, but there were one or two instances where persons were swept up by tornadic winds, resulting in death.

The number injured from 1937 tornadoes totaled somewhat in excess of 312, for in many cases injuries were described as "several injured," or "additional number injured." The greatest number of injuries were sustained from tornadic activity which occurred in the period from February through June; 36 were reported injured in each of the months, February and March; 105 in April; 21 in May, and 104 in June. In the closing months of the year 9 were reported injured in October and 1 in August. In the preceding year, 1936, the number of injuries were somewhat in excess of 2,928.

Property losses that were reported as the result of tornadoes (crop losses included) were without question much less than the true losses, for it is seldom feasible to secure data for all parts of a long track, and often no trustworthy reports can be obtained. Estimated losses for 1937 amounted to \$3,155,875, which includes \$504,900 damage to crops.

Table 6, page 12, shows that 1937 was the year of least destruction in the last 22 years of record and also falls far below the average expectant annual loss of approximately \$12,000,000. The next lowest of record with respect to damage was the year 1931 when property losses were reported as \$3,215,400.

Table 4 shows the destruction by 1937 tornadoes expressed in dollars, by months, for the various States or sections. On a State basis, Iowa suffered the greatest annual loss, with \$395,800, the greatest portion of which was incurred during May. Maryland ranked second, the damage amounting to \$329,025, and Missouri third, with \$326,000. State losses during 1937 were far less than in 1936. In 1936 the State of Georgia alone suffered a total loss of \$16,117,700; North Carolina suffered a loss of \$2,073,000; and Texas, \$1,313,000. Several of the 1937 tornadoes took place without a single fatality or any financial loss. Disturbances in this category existed in the upper air and were observed or heard but did not propagate themselves to the earth's surface. Also one or two tornadoes in the Western States traversed barren land devoid of houses and crops; consequently, no destruction resulted.

¹ Preliminary report on tornadoes in the United States during 1937, by J. P. Kohler, Monthly Weather Review, December 1937.

TABLE 4.—*Tornado destruction in dollars, by months, during 1937*

State or section	January	February	March	April	May	June	July	August	September	October	November	December	Crop	Property	Total
Alabama.....			{ ^{c(1)} 1,000	{ ^{c(1)} 25,000						{ ^{c(1)} 24,200			(1)	50,200	\$ 50,200
Arizona.....									2,500					2,500	2,500
Arkansas.....				40,000		{ ^c 52,000 110,000				{ ^c 15,000 55,000			67,000	205,000	272,000
Colorado.....				300	10,000	(2)								10,300	10,300
Florida.....		{ ^c 5,000 21,000		16,500					{ ^c 5,000 1,000				10,000	38,500	48,500
Georgia.....		(2)				{ ^c 2,000 5,000							2,000	\$ 5,000	\$ 7,000
Illinois.....				87,500										87,500	87,500
Indiana.....						{ ^c 5,000 10,000			4,750				5,000	14,750	19,750
Iowa.....				17,100	{ ^c 12,000 273,800	{ ^c 6,200 76,700	{ ^c 3,000 7,000	(1)					21,200	\$374,600	\$395,800
Kansas.....				12,650	14,000	60,000	{ ^c 1,000 4,000	500					1,000	91,150	92,150
Kentucky.....			150,000											150,000	150,000
Louisiana.....		{ ^c 50,000	4,000											54,000	54,000
Maryland.....		{ ^c 50,000			{ ^c 37,000 192,025	(1)							87,000	242,025	329,025
Minnesota.....					190,000	{ ^c 12,500		{ ^{c(2)} 10,000					(2)	212,500	212,500
Mississippi.....		3,300								20,000				23,300	23,300
Missouri.....		204,000		\$ 92,000	30,000									326,000	\$326,000
Montana.....					2,000									2,000	2,000
Nebraska.....						{ ^c 6,000 43,000							6,000	43,000	49,000
New England.....					(1)		51,200							\$ 51,200	\$ 51,200
New York.....											20,000			20,000	20,000
North Carolina.....		30,000								{ ^{c(1)} 20,000			(1)	50,000	50,000
North Dakota.....						{ ^c 10,000 15,000	{ ^c 50,000 (3)						60,000	\$ 15,000	\$ 75,000
Ohio.....					{ ^c 15,000 100,000	(5)							15,000	\$100,000	\$115,000
Oklahoma.....						{ ^c 85,500 123,000				{ ^c 8,000 50,000			93,500	173,000	266,500
Oregon.....						3,000								3,000	3,000
Pennsylvania.....						{ ^c 15,000 85,000							15,000	85,000	100,000
South Carolina.....			{ ^{c(2)} 55,000			3,000							(4)	58,000	\$ 58,000
South Dakota.....					{ ^c 1,000 100,000	{ ^c 200 600	1,000						1,200	101,600	102,800
Tennessee.....				6,350										6,350	6,350
Texas.....					{ ^c 40,000 10,000	{ ^c 80,500 25,500	1,000	{ ^c 500 3,500		3,000			121,000	43,000	164,000
Virginia.....		2,000												2,000	2,000
Wisconsin.....						10,000								10,000	10,000
Crops.....		55,000	(4)	(4)	105,000	\$ 262,400	54,000	\$ 500	5,000	\$ 23,000			504,900		
Real property.....		360,800	210,000	297,400	921,825	582,300	64,200	14,000	8,250	172,200	20,000			2,650,975	
Total.....		415,800	210,000	297,400	1,026,825	844,700	118,200	14,500	13,250	195,200	20,000				3,155,875

^c Damage to crops.¹ Damage small.² Damage occurred; no estimate obtained.³ Additional losses occurred; no estimate obtained.⁴ See monthly reference for qualifying remarks.⁵ Property damage considerable; no definite estimate obtained.

From the foregoing one gathers that 1937 was a rather fortunate year from several stand-points in contrast to the year 1936. By way of summary, 148 tornadoes were reported (only 11 less than 1936), 29 deaths were reported, and the injured numbered 312. In 1936, 552 deaths occurred, 2,928 people were injured, and property losses exceeded \$26,000,000.

In general, 132 of the 148 tornadoes occurred without a single fatality. Nine tornadoes incurred 1 death each, 4 with 2, 1 with 3, 1 with 4, and 1 with 5 deaths. Similarly, 100 tornadoes took place without a single injury; 8 occurred with 1 injury each, 13 with 2, 5 with 3, 4 with 5, 4 with 6, 3 with 7, and 7 tornadoes incurred injuries respectively, of 15, 20, 22, 23, 25, 30, and 50. In addition, a series of 3 tornadoes in Missouri on the afternoon of February 20 caused 13 people to be injured.

SYNOPSIS BY STATES

Thirty-four States in all reported tornadoes during the year 1937. No tornadoes were reported in the following 14 States: California, Idaho, Delaware, Michigan, Nevada, Vermont, Rhode Island, New Jersey, New Mexico, Utah, Washington, West Virginia, Massachusetts, and Wyoming, nor in the District of Columbia.

In comparison with the 22-year average (1916-37) the occurrence of such storms was about normal in the Ohio Valley and Middle and Northern Atlantic States, though in the mid-Gulf Coast States and Southeastern sections the yearly totals on a State basis were generally short

of the average by 3 to 6. In the Interior, Iowa with 31, had more than twice normal; Missouri with 12, 5 more than average; Kansas experienced a normal year with a frequency of 15; North Dakota and South Dakota reported about the normal number, 2 in the former and 5 in the latter State; Minnesota with 6, averaged 3 above normal, while Wisconsin had 2 less than the normal amount of 4. West of the principal Great Plains States, as normally expected, very few tornadoes occurred—3 in Colorado and 1 each in the States of Montana, Oregon, and Arizona.

Table 5 shows the number of deaths and injuries by months in sections on a State basis for the year 1937. This table shows, in the main, that the greatest number of fatalities and injuries occurred in the first 6 months of the year, principally throughout the States in and east of the Mississippi and Missouri Valleys.

TABLE 5.—Deaths and injuries incurred by tornadoes during 1937

State or section	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Alabama.....					2	0	5	30											0	2					7	32
Arizona.....																	0	0							0	0
Arkansas.....							2	30			1	50							0	2					3	82
Colorado.....							0	0	0	0	0	0													0	0
Florida.....			0	0			0	15									0	0							0	5
Georgia.....			0	0							0	0													0	0
Illinois.....							0	2																	0	2
Indiana.....											0	7					0	0							0	7
Iowa.....							0	0	1	10	0	0	0	0	0	0									1	10
Kansas.....							0	1	0	0	1	8	0	0	0	0									1	9
Kentucky.....					5	23																			5	23
Louisiana.....			0	15	1	6																			1	21
Maryland.....			0	0					0	0	0	0													0	0
Minnesota.....									0	0	0	0			1	1									1	4
Mississippi.....			0	0					0	3	0	0							0	2					0	2
Missouri.....			0	19			2	234	1	2															3	55
Montana.....									0	0															0	0
Nebraska.....											0	0													0	0
New England section:																										
Connecticut.....													0	0											0	0
Maine.....													0	0											0	0
Massachusetts.....									0	0															0	0
New Hampshire.....													0	0											0	0
New York.....																					0	0			0	0
North Carolina.....			0	2							2	2	0	0					0	2					0	4
North Dakota.....											2	22													2	2
Ohio.....									0	5	3	1							0	1					3	27
Oklahoma.....											1	12													1	13
Oregon.....											0	1													0	1
Pennsylvania.....											0	2													0	2
South Carolina.....					0	7					0	0													0	7
South Dakota.....									0	0	0	0	0	0											0	0
Tennessee.....							0	3																	0	3
Texas.....									1	1	0	0	0	0	0	0			0	0					1	1
Virginia.....			0	0																					0	0
Wisconsin.....											0	0													0	0
Total.....			0	36	8	36	9	105	3	21	8	104	0	0	1	1	0	0	0	9	0	0			29	312

¹ Several others received minor injuries.

² In addition, 1 instance, several reported injured; definite figure not obtained.

BOUNDARY-CROSSING TORNADOES

From the data collected, it was safely established that 4 of the 148 tornadoes of 1937 crossed State boundaries. In order of time, the first disturbance originated in the very early morning of April 24 in the extreme northern portion of Mississippi County, Ark., and pursued a northerly course, traversing the following counties in Missouri: Pemiscot, Madrid, Stoddard, and Scott, and becoming extinct in Cape Girardeau County. The total length of path, not continuous, was more than 95 miles, and the width of the path averaged about 60 yards. No deaths occurred, 5 persons were injured, and property damage, mostly in the vicinities of New Madrid and Cape Girardeau, amounted to \$40,000.

During May two boundary-crossing tornadoes occurred in the northern Plains region. On May 17, near 10:30 p. m., a disturbance was first noted in the extreme eastern portion of Deuel County, S. Dak., which followed a general southeasterly course into Minnesota, across Yellow Medicine, Lincoln, and Lyon Counties, terminating in Murray County. While no deaths resulted, three persons were injured in the Minnesota section, and property damage, mostly rural, was estimated at \$150,000. The total length of path, not continuous, exceeded 63 miles, and shortage of data made it impossible to evaluate a mean width. The following day, May 18, a disturbance originating in the southwestern portion of Jackson County, Minn., some time

around 1:30 a. m., crossed into Iowa, moving in a southeasterly direction and traversing portions of nine counties, viz, Dickson, Emmet, Palo Alto, Kossuth, Humboldt, Wright, Hamilton, Hardin, and Story. The total length of path exceeded 125 miles, but was relatively irregular with large intervals, at times, between contacts. No damage was reported from Jackson County, Minn.; however, in Iowa, the aggregate amounted to \$66,500. No deaths were incurred, and two persons were injured in Palo Alto County, Iowa.

The fourth boundary-crossing disturbance took place in the New England section on July 17 about 5:30 in the evening; the disturbance traversed the central and northern portions of Belknap and southeastern portion of Carroll County in New Hampshire and continued into the extreme southern portion of Oxford County, Maine. No deaths or injuries were incurred. Property damage in New Hampshire was estimated at \$1,200, while in Maine, though no estimate was obtained, most probably the amount was small. The length of path was approximately 49 miles; the width was 125 yards, roughly.

The tornadoes during the year 1937, based on State occurrences, numbered 152, but enumerated according to origin and extinction the number is decreased to 148, as is evident from the above discussion.

SPEED OF ADVANCE

Reports gathered on the various tornadoes during the year were not of sufficient detail to permit computation of translational speeds; however, in this respect it is reasonable to assume that the behavior of tornadoes during the year generally followed, rather closely, previous observed limits varying from 15 to 20 miles per hour to maxima of 40 to 60 miles per hour or more.

MAJOR 1937 TORNADOES

In contrast to the outstanding 1936 tornadoes ² the most severe storms of 1937 were exceedingly mild. A disturbance in Fayette and Clark Counties, Ky., in the late afternoon of March 25 resulted in 5 deaths, injured 23 people, and incurred property damage of \$150,000. In Ohio, on June 21, the northern portion of Athens County and the southwestern portion of Washington County were visited by a destructive tornado in the late afternoon. Three persons were killed, 22 injured, and 50 houses were destroyed or damaged. From a monetary standpoint, the greatest loss which occurred at any one time resulted from a series of three tornadoes in Missouri, between the hours of 4 and 5 p. m. of February 20. This family of tornadoes followed generally parallel paths 10 miles apart and incurred damage estimated at \$200,000. In addition, 13 persons were seriously injured.

SUMMARY FOR PAST YEARS

Table 6 gives the total number of tornadoes, deaths resulting from such storms, and the estimated property losses for the years 1916-37.

TABLE 6.—Deaths and property losses caused by tornadoes, 1916-37

Year	Reported	Aggregate loss of life	Aggregate reported property losses	Year	Reported	Aggregate loss of life	Aggregate reported property losses
	<i>Number</i>				<i>Number</i>		
1916.....	86	140	\$2,511,500	1929.....	197	274	\$10,049,400
1917.....	121	508	15,007,700	1930.....	192	179	12,289,100
1918.....	81	134	7,631,200	1931.....	94	36	3,215,400
1919.....	65	205	6,861,500	1932.....	152	394	8,988,525
1920.....	87	498	15,205,000	1933.....	260	362	16,190,640
1921.....	106	202	5,406,300	1934.....	147	47	4,424,950
1922.....	108	133	6,630,000	1935.....	182	70	4,732,930
1923.....	100	109	2,958,750	1936.....	159	552	26,228,550
1924.....	130	376	26,120,850	1937.....	148	29	3,155,875
1925.....	119	794	24,023,900				
1926.....	111	144	4,318,950	Total.....	3,012	5,818	262,632,270
1927.....	164	540	43,445,650	Average.....	137	264	11,937,830
1928.....	203	92	13,235,600				

² See p. 27, U. S. Meteorological Yearbook, 1936.

ITEMS OF TABLE 7

Where two or more county names appear, the word "and" between them or before the last-named county, indicates that the tornado path began in the first and continued in the order named, and was confined to those counties, unless it was one of the few tornadoes that crossed a State boundary, in which case only the portion within the single State is indicated. Frequently braces are used, especially in cases where it is possible to present statistics for each county. Notations immediately after county names such as (N.), (NE.), (E.), and (E.-C.) indicate, respectively, North, Northeast, East, and East-Central, portions of the counties in which the disturbances occurred.

The direction of advance is usually entered to 8 points of the compass, but occasionally to 16 points when sufficient detail exists. If the tornado changed direction, the curvature of path is outlined by 2 directions separated by a hyphen.

The length of path of a "not continuous" storm is not the length devastated but the entire distances from first havoc to last. The width of the path is usually the mean width, but occasionally the width has varied sufficiently for the limits of variation to be given; that is, the minimum and maximum widths. It will be noted that in several instances the tornadic character of a storm is given as somewhat doubtful, but in these cases the presence of marked rotary winds over a rather narrow area was taken as sufficient evidence to classify the storm as a tornado.

TABLE 7.—Tornadoes of 1937, arranged by States

State, number, and date	Hour	County	Direction of ad- vance	Length of path	Width of path	Killed	In- jured	Property losses	Remarks	
ALABAMA										
				Miles	Yards	Num- ber	Num- ber	Dollars (^{1 12})		
1. Mar. 24.....	10:45 a. m.-----	Dale (W.-C.).....	NE	1	200	2	0	{ 1,000	Path not continuous.	
2. Apr. 8.....	8:15 a. m.-----	Pike (SE.).....	NE	1	100	4	25	{ 20,000		
3. Apr. 24.....	2:30 p. m.-----	Houston (C.).....	SE	3	100	1	5	{ 5,000	} Do.	
4. Oct. 17.....	11:45 p. m.-----	Mobile (SE.).....	NNE	2	40	0	0	{ (^{1 12}) 1,200		
5. Oct. 26.....	2:25 p. m.-----	Mobile (ext. E.).....	E	4	20	0	2	{ 23,000		
ARIZONA										
1. Sept. 1.....	9:15 p. m.-----	Maricopa (C.).....	SE	3	17-33	0	0	2,500	Path of damage not continuous. Though definitely possessing tornado characteristics, the storm was extremely mild for a tornado.	
ARKANSAS										
1. Apr. 23.....	9:15 p. m.-----	Saline (S.-C.).....	NE	2	50	2	30	40,000	22 homes destroyed, many other buildings damaged. Continued into Missouri, as No. 6; no damage reported in Mississippi County.	
2. Apr. 24*.....	Near 2:30 a. m.-----	Mississippi (ext. N.).....	N	(7)	(8)	0	0	(3)		
3. June 9.....	4:00 a. m.-----	Benton (SW.).....	ENE	(2)	440	0	0	{ ¹ 2,000 35,000	} More than 100 houses damaged in Decatur.	
4. June 9.....	11-11:30 p. m.-----	{Carroll (SE.).....	ESE	8	440	1	40	{ ¹ 40,000 60,000		
		{Boone (SW.).....	ESE	11	440	0	10	{ ¹ 10,000 15,000	} About 15 buildings demolished or damaged.	
		{Yell (ext. NE.).....	ENE	4	300	0	2	{ ¹ 5,000 40,000		
5. Oct. 18.....	11:30 p. m.-----	Pope (ext. SE.).....	ENE	5	300	0	0	{ ¹ 5,000 5,000	} Property destroyed or damaged.	
		{Conway (SW.).....	ENE	11	300	0	0	{ ¹ 5,000 10,000		
COLORADO										
1. Apr. 20.....	10:20 a. m.-----	Denver (N.).....	NE	(2)	25	0	0	300	The length of the path was about 100 feet after which the funnel cloud lifted 50 or 60 feet into the air, again touched the earth for 75 feet and lifted and dissipated without doing any more damage.	
2. May 26.....	1:15 p. m.-----	Douglas (C.).....	NW-SE	(3)	33	0	0	10,000		Several buildings were partly destroyed and some trees were uprooted. Length of path about 3 city blocks.
3. June 9.....	4:30 p. m.-----	Weld (W.-C.).....	SE	½	(3)	0	0	(2)		Some trees were uprooted or broken up, telephone and power lines and automobiles damaged. Length of path about 2 city blocks.

For footnotes see end of table.

TABLE 7.—Tornadoes of 1937, arranged by States—Continued

State, number, and date	Hour	County	Direction of advance	Length of path	Width of path	Killed	Injured	Property losses	Remarks
FLORIDA									
1. Feb. 4.....	Afternoon.....	Manatee (ext. W.)	NE	Miles 23/100	Yards 50	0	0	Dollars 6,000	
2. Feb. 21.....	11 a. m.-12 noon...	Pinellas (N.), Hills-boro (NW.), and Pasco (SW.).	ENE	30	30-60	0	0	{ 1 5,000 15,000	Damage mostly in Odessa-Lutz section.
3. Apr. 4.....	5 a. m.....	Bay (S.-C.)	NE	$\frac{1}{4}$	35	0	2	3,500	
4. Apr. 6.....	P. m.....	Broward (ext. E.)	(?)	(?)	(?)	0	0	3,000	Attended by hail. Occurred in southwest part of Miami; several other persons received minor injuries. ³
5. Apr. 9.....	4:30 a. m.....	Dade (ext. E.)	NE	4 100	17	0	33	10,000	
6. Sept. 20.....	9 p. m.....	St. Johns (ext. W.)	SW	4 70	1,000	0	0	{ 1 5,000 1,000	
GEORGIA									
1. Feb. 9.....	11:05 a. m.....	Dougherty (ext. NE.) and Lee (ext. SW.).	NE	4-6	100-200	0	0	(³)	Storm struck NE. part of Dougherty County, demolishing 3 houses and damaging 2 other buildings in Lee County.
2. June 28.....	3 p. m.....	Jenkins (N.)	ENE	3 10-20	6 $\frac{1}{2}$ -2	0	0	{ 1 2,000 5,000	Evidences indicate there existed a family of 3 tornadoes, thus accounting for the great width and length of destructive area; 3 funnel-shaped clouds observed, also reports indicated irregular, directional movement, and noncontinuous path.
3. June 28.....									
4. June 28.....									
ILLINOIS									
1. Apr. 14.....	6:10 p. m.....	McLean (W.)	E	1	440	0	2	87,500	Funnel-shaped cloud observed; storm followed a zigzag course while advancing eastward.
INDIANA									
1. June 13.....	6:40 p. m.....	Fountain (C.)	E	5	500	0	7	{ 1 5,000 10,000	Funnel-shaped cloud observed; dipped down and receded upward almost immediately.
2. Sept. 1.....	10:45 a. m.....	Rush (N.)	SW-W	(?)	33	0	0	750	
3. Sept. 10.....	3:45 p. m.....	Pike (W.-C.)	NE	$\frac{1}{2}$	33-66	0	0	4,000	Funnel-shaped cloud observed.
IOWA									
1. Apr. 23.....	7 p. m.....	Greene (C.)	NE	(?)	(?)	0	0	4,000	Webster County is adjacent to and NE. of Greene County; No. 2 occurred about 35 miles NNE. from No. 1; probably a continuation of No. 1.
2. Apr. 23.....	8 p. m.....	Webster (C.)	NE	(?)	(?)	0	0	10,000	
3. Apr. 23.....	9 p. m.....	Boone (N.)	NE	(?)	200	0	0	1,100	Boone County adjacent to and E. of Greene County; No. 3 occurred about 20 miles NE., of No. 1.
4. Apr. 29.....	7-9 p. m.....	Greene (ext. NE.) Webster (ext. SW.) Hamilton (SW.)	NE NE NE	(?) (?) (?)	(?) (?) (?)	0 0 0	0 0 0	2,000 None (?)	Disturbance evidently traveled mostly aloft, with relatively large intervals between contacts with earth. No damage reported in Webster County; total damage in other 2 counties \$2,000.
5. May 11.....	4 p. m.....	Lyon (E.)	NE	(?)	(?)	0	0	1,800	
6. May 11.....	7 p. m.....	Wright (NE.)	NE	10	100	0	1	40,000	Probably a continuation of No. 6.
7. May 11.....	9 p. m.....	Floyd (NW.)	NE	(?)	(?)	0	0	10,000	
8. May 11.....	9:30 p. m.....	Story (ext. N.-C.)	E	(?)	(?)	0	1	2,000	Continuation of Minnesota No. 3. This disturbance (No. 10) proceeded in a southeasterly direction along a relatively narrow path across the counties enumerated, except it is presumed that it traveled aloft over Kossuth, Wright, and
9. May 18.....	1 a. m.....	Wayne (ext. NW.)	E	(?)	(?)	0	0	10,000	
	1:30 a. m.....	Dickson (ext. NE.)	SE	4	(?)	0	0	10,000	
	Shortly after 1:30 a. m.	Emmet.	SE	4	(?)	0	0	10,000	
	2 a. m.....	Palo Alto.	SE	10	(?)	0	2	25,500	
		Kossuth.	SE	(?)	(?)	0	0	(⁴)	
	2:30 a. m.....	Humboldt.	SE	(?)	(?)	0	0	6,000	
		Wright.	SE	(?)	(?)	0	0	(⁴)	
	3 a. m.....	Hamilton.	SE	(?)	50	0	0	10,000	
10. May 18*.....	3:30 a. m.....	Hardin.	SE	(?)	(?)	0	0	(⁴)	
		Story (NE.)	SE	(?)	(?)	0	0	5,000	

For footnotes see end of table.

TABLE 7.—Tornadoes of 1937, arranged by States—Continued

State, number, and date	Hour	County	Direction of advance	Length of path	Width of path	Killed	Injured	Property losses	Remarks
IOWA—con.				Miles	Yards	Number	Number	Dollars	
11. May 18.....	5 a. m.....	Linn (SE.).....	SE	(7)	(8)	0	1	3,500	Hardin Counties. Damage was spotted; as the storm skipped for considerable distances between points where destruction of property occurred. Thunderstorms and wind caused lesser damages alongside the path of the principal tornado. Length of path, not continuous, more than 125 miles.
12. May 20.....	10 p. m.....	Clarke (N.).....	NE	3½	400	0	0	(3)	
13. May 26.....	3:30 p. m.....	Boone (SW.).....	SE	6	300	0	0	{ 1 2,000 30,000	
14. May 26.....	{ 5 p. m.....	Jasper (NW.).....	NE	10	(9)	1	5	{ 1 10,000 75,000	Additional losses occurred above amounts given.
15. June 2.....	{ 5:10 p. m.....	Marshall (SW.).....	NE	(7)	(9)	0	0	{ 35,000	
16. June 3.....	2:45 p. m.....	Boone (S.).....	NE	(2)	100	0	0	{ 4,000	
17. June 3.....	Early a. m.....	Jasper (C.).....	SE	10	(9)	0	0	{ 1 6,000 26,500	Occurred shortly after No. 13; probably a continuation of No. 13.
18. June 13.....	1:30 p. m.....	Mahaska (SE.).....	SE	(7)	(2)	0	0	{ 2,000	
18. June 13.....	(3)	Wapello (NE.).....	SE	(2)	(2)	0	0	{ 2,000	
19. June 13-14....	12 midnight.....	Dubuque (NE.).....	NE	(7)	(2)	0	0	{ 3,000	Rural property destroyed or damaged.
20. June 18.....	7 p. m.....	Plymouth (S.).....	E	12	100	0	0	{ 1 200 4,500	
21. June 19.....	6 p. m.....	Hancock (NE.).....	SE	(7)	(2)	0	0	{ (5)	
22. June 19.....	{ 9:30 p. m.....	Mitchell (E.).....	E	(7)	(2)	0	0	{ 3,000	Tornado first noted in Mitchell County. Disturbance terminated in Winneshiek County; path not continuous; damage rather spotted.
	{ (2)	Howard (N.).....	E	(7)	(2)	0	0	{ (4)	
	{ 10 p. m.....	Winneshiek (NW.).....	E	(7)	100	0	0	{ 12,500	
23. June 20.....	(2)	Winneshiek (NE.).....	E	5	(2)	0	0	10,000	Rural property damaged. Damage reported to be small.
24. June 20.....	7 p. m.....	Dubuque (SW.).....	E	(7)	(5)	0	0	(3)	
25. June 20.....	10 p. m.....	Winneshiek (SW.).....	E	(7)	(8)	0	0	8,200	
26. June 27.....	8 p. m.....	Buchanan (SE.).....	E	(7)	100	0	0	1,000	Damaged 1 farm only. Rural property destroyed. Rural property damaged. Path of No. 27 not continuous.
27. July 3.....	6 p. m.....	{ Hardin (NE.).....	E	(7)	(8)	0	0	{ (5)	
		{ Grundy (NW.).....	E	(7)	(8)	0	0	{ (5)	
28. July 3.....	9 p. m.....	Wapello (E.).....	SE	15	300	0	0	6,000	Accompanied by destructive hail. Crops and rural property damaged.
29. July 25.....	2 p. m.....	Madison (S.).....	SE	(7)	800	0	0	(5)	
30. July 31.....	11 a. m.....	Clarke (C.).....	SE	(7)	440	0	0	{ 1 3,000 1,000	
31. Aug. 7.....	Night.....	Mills (C.).....	(2)	(7)	(8)	0	0	(3)	Damage reported as small; unroofed small buildings.
KANSAS									
1. Apr. 23.....	5:30 p. m.....	Montgomery (SW.)..	NE	3	100	0	1	750	Most of damage to buildings and wire service. Rural property damaged. Total loss for both counties.
2. Apr. 23.....	5:55 p. m.....	Osage (E.).....	NE	9	300	0	0	10,900	
3. Apr. 23.....	7:30 p. m.....	{ Crawford (NW.).....	NE	5	880	0	0	{ 3 1,000	
4. } May 11 3.....	5:30 p. m.....	{ Bourbon (SW.).....	NE	2	880	0	0	{	A series of 5 tornadoes occurred, each tornado was distinct with respect to time and path from others, though paths were all within 10 miles of each other; only 2 were destructive; one farm was struck twice.
5. }									
6. }									
7. }		Kingman (S.) and Harper (N.).	SE	5-15	440-880	0	0	2,000	Chief damage occurred in Phillipsburg and vicinity.
8. }									
9. May 19.....	9:07 p. m.....	Phillips (C.).....	NE	1½	440	0	0	10,000	
10. } May 21 3.....	8 p. m.....	{ Wilson (E.) and Neosho (W.).	NE	6	33	0	0	2,000	{ 2 funnel-shaped clouds were observed; however, from the narrowness of path, it is judged only 1 tornadic disturbance reached the earth's surface.
11. }									
12. June 8.....	5 p. m.....	Stanton (E.).....	SE	½	100	0	2	15,000	
13. June 8.....	7:30 p. m.....	Stevens (NE.).....	NE	8	880	1	6	45,000	Disturbance turned over freight cars and damaged some rural property.
14. July 15.....	4 p. m.....	Rice (N.).....	NE	15	880	0	0	{ 1 1,000 4,000	
15. Aug. 3.....	3 p. m.....	Sumner (SW.).....	E	½	67	0	0	{ 500	

For footnote see end of table.

TABLE 7.—Tornadoes of 1937, arranged by States—Continued

State, number, and date	Hour	County	Direction of advance	Length of path	Width of path	Killed	Injured	Property losses	Remarks
KENTUCKY				Miles	Yards	Number	Number	Dollars	
1. Mar. 25-----	Near 6 p. m.-----	Fayette (SE.) and Clark (W. and C.).	ENE	15	100-200	5	23	150,000	Path not continuous.
LOUISIANA									
1. Feb. 20-----	2:30 p. m.-----	Lincoln (N. and W.).	ENE	20	400	0	15	50,500	Heaviest damage in vicinity of Dubach.
2. Mar. 19-----	2:30 p. m.-----	East Carroll-----	NE	3	250	1	6	4,000	
MARYLAND									
1. Feb. 21-22---	{ 11:30 p. m. 21st to 12:30 a. m. 22d.	{ Anne Arundel (S.) [across Chesapeake Bay], Queen Annes (Kent Island) and Kent (ext. SW.).	NE	40	(⁹)	0	0	{ 150,000 50,000	{ Disturbance originated in southern Anne Arundel County, pursued a course northeastward across Chesapeake Bay and Northern Kent Island, terminated in southwestern Kent County.
2. May 6-----	12:45 p.m.-----	Baltimore (S.)-----	E	4 333	33	0	0	500	Disturbance occurred in Hamilton, a suburb in extreme northeastern portion of Baltimore city; funnel-shaped cloud observed.
3. May 13-----	4:30 p. m.-----	Frederick (C.)-----	NE	5	(⁹)	0	0	10,000	Funnel-shaped cloud observed; mostly rural property damage.
4. May 13-----	5:30 p. m.-----	Westminster (C.)----	NE	8	* 1	0	0	{ 135,000 120,000	{ Funnel-shaped cloud observed.
5. May 22-----	5 p. m.-----	{ Dorchester (Ext. NW.).	NE	1	200-1,000	0	0	{ 12,000 3,025	{ Funnel-shaped clouds observed; crops and rural property damaged.
6. May 26-----	4:20 p. m.-----	Baltimore (S.)-----	SE	7	(⁹)	0	0	53,500	Disturbance took place in central and east-central portions of Baltimore city; funnel-shaped cloud observed.
7. May 26-----	8:33 p. m.-----	Montgomery (E.-C.).	SE	1	100	0	0	5,000	
8. June 17-----	2:40-2:47 p. m.-----	Harford (E.-C.) and Cecil (W.-C.).	NE	3	100	0	0	(³)	Small tornado; no damage reported.
9. July 31 ¹ -----	7:30 p. m.-----	Talbot and Queen Annes (Eastern Bay). ³	SE	(³)	33-50	0	0	None-----	Waterspout of 10-minute duration observed on Eastern Bay, off McDaniels, between north Talbot County and southwestern Queen Annes County.
MINNESOTA									
1. May 11-----	6:15 p. m.-----	Nicollet (E.) and Le Sueur (S.).	E	30	100	0	0	40,000	Path not continuous.
2. May 17*-----	10:30-11:55 p. m.-----	Yellow Medicine (ext. W.), Lincoln (NE.), Lyon (SE.) and Murray.	SE	63	(²)	0	3	150,000	Continuation of South Dakota No. 3; path not continuous; mostly rural property damaged or destroyed.
3. May 18*-----	About 1:30 a. m.-----	Jackson (SW.)-----	SE	(³)	(³)	0	0	(³)	Continued into Iowa as No. 10; no damage reported in Jackson County.
4. June 19-----	7 p. m.-----	{ Hennepin (SW.) and Carver (N.).	NE	10	440	0	0	{ (^{1 10}) 12,500	{ Possibly small tornado; path not continuous; rural property damaged.
5. Aug. 18-----	3 p. m.-----	Lake of the Woods (ext. SE.).	SE	(⁷)	(⁸)	0	1	(¹⁰)	Possibly small tornado; large recreational building moved 15 feet off foundation; other damage occurred.
6. Aug. 25-----	6 p. m.-----	Traverse (W.-C.)----	E	4	(²)	1	0	{ (^{1 10}) 10,000	{ A number of farm buildings demolished.
MISSISSIPPI									
1. Feb. 20-----	5 p. m.-----	Warren (N.)-----	E	1/2	100	0	0	2,500	Occurred 3 miles north of Vicksburg.
2. Feb. 20-----	5 p. m.-----	Adams (SW.)-----	NE	(⁷)	300	0	0	800	
3. Oct. 17-----	4:20 p. m.-----	Adams (ext. W.)-----	N	1/2	100	0	2	20,000	
MISSOURI									
1. Feb. 8-----	1 p. m.-----	Butler (SE.)-----	NE	(²)	200	0	6	4,000	
2. Feb. 20-----	4-5 p. m.-----	{ Greene, Christian, Webster, Wright, and Douglas.	NE	10-30	300-450	0	13	200,000	{ A series of 3 tornadoes took place; paths parallel and 10 miles apart.
3. Feb. 20-----	4-5 p. m.-----	{ Webster, Wright, and Douglas.	NE	10-30	300-450	0	13	200,000	{ Damage occurred; no estimate secured.
4. Apr. 14-----	6 p. m.-----	Webster (N.)-----	SE	14	(²)	0	6	(³)	
6. Apr. 24*-----	2:30 a. m.-----	Pemiscot, Madrid, Stoddard, Scott, and Cape Girardeau.	N	95	60	0	5	40,000	Continuation of Arkansas No. 2; path not continuous; greatest damage in vicinities of New Madrid and Cape Girardeau.
7. Apr. 29-----	4 p. m.-----	Caldwell (NE.)-----	N	(²)	30	0	0	2,000	

For footnotes see end of table.

TABLE 7.—*Tornadoes of 1937, arranged by States—Continued*

State, number, and date	Hour	County	Direction of advance	Length of path	Width of path	Killed	Injured	Property losses	Remarks
MISSOURI—con.				Miles	Yards	Number	Number	Dollars	
8. Apr. 29.....	5:45 p. m.....	Daviess (NW.).....	N	(2)	30-800	0	0	(5)	
9. Apr. 29.....	Early evening.....	Greene (NW.).....	NE	(2)	(2)	2	20	30,000	
10. Apr. 29.....	do.....	Howell (N.) and Texas (S.).....	NE	(2)	(2)	0	(11)	20,000	
11. Apr. 29.....	8:30 p. m.....	Pulaski (NE.).....	N	(2)	100	0	3	(10)	
12. May 25.....	4-5 p. m.....	Caldwell (NE.), Daviess (ext. SE.), Livingston (N.), Grundy (ext. SE.) and Sullivan (S.).....	NE	10	100-450	1	2	11330,000	Path not continuous.
MONTANA									
1. May 28.....	6 p. m.....	Rosebud (C.).....	SE	10	350	0	0	2,000	Damage to ranch buildings.
NEBRASKA									
1.) June 12.....	7:30 p. m.....	Adams (NE.).....	ENE	6	200	0	0	{ 1 1,000 12,000	{ 3 funnel-shaped clouds observed in this series; rural property damage.
3.)									
4. June 18.....	About 5 p. m.....	Pierce (NE.).....	SE	5	200	0	0	{ 1 5,000 30,000	
5. June 18.....	6:45 p. m.....	Dixon (S.).....	SE	1	400	0	0	1,000	
NEW ENGLAND									
1. May 17.....	4 p. m.....	Fairfield County, Conn. (ext. SW.).....	(2)	(7)	(8)	0	0	(3)	Disturbance observed near Greenwich; large trees uprooted and small trees snapped off at their bases.
2. July 17*.....	5:30 p. m.....	Belknap County, N. H. (C. and NE.) Carroll County, N. H. (SE.).....	NE	40	425	0	0	3 1,200	Tornado reported to have started near Laconia, N. H., and ended in vicinity of Brownfield, Maine. Damage at Silver Lake, N. H. (Carroll County). ³
3. July 17*.....	(3).....	Oxford (ext. S.) Maine.....	NE	9	(2)	0	0	(3)	Continuation of New England No. 2; no estimate of damage secured.
4. July 26.....	3:45 p. m.....	Litchfield County, Conn. (ext. SE.), and Hartford County, Conn. (ext. SW.).....	NE-E	6	150-200	0	0	50,000	Began western end of Terryville R. R. tunnel; moved toward NE, tending toward E. over Bristol; disappeared about 1 mile E. of Bristol after passing northern section of town.
NEW YORK									
1. Nov. 28.....	(2).....	Cattaraugus (ext. NE.) and Wyoming (ext. SW.).....	NNE	12	(2)	0	0	20,000	Probably a small tornado.
NORTH CAROLINA									
1. Feb. 21.....	7:15 p. m.....	Guilford (W. & N.) and Rockingham (S.).....	NE	20	300	0	2	30,000	Damage to farm buildings and forests.
2. Oct. 19.....	3 p. m.....	Richmond (S.).....	NE	10	200	0	2	{ (1 12) 20,000	{ Damage to farm buildings, trees, and 2 towers of power line.
NORTH DAKOTA									
1. June 23.....	During night (p. m. 23d).	Renville (NW.).....	SE	9	500	2	2	{ 1 10,000 15,000	{ Buildings on at least 4 farms were leveled and some livestock were killed.
2. July 24.....	8 a. m.....	Benson (N.).....	SE-NE	25	600	0	0	{ 1 50,000 (3)	{ Property damage considerable; no definite estimate obtained.
OHIO									
1. May 27.....	3-4 p. m.....	Seneca (SW.).....	SE	10	100-200	0	5	{ 1 15,000 100,000	50 houses were destroyed or damaged in Athens County. Church and store destroyed at Lykens and a number of barns in the county.
2. June 21.....	During afternoon.	Athens (N.) and Washington (SW.).....	SE	30	(2)	3	22	(3 3)	
3. June 21.....	11 p. m.....	Crawford (NW.).....	SE	10	(2)	0	0	(3 3)	
OKLAHOMA									
1. June 9.....	6:30 p. m.....	Payne (SE.).....	NE	10	440	0	3	{ 1 20,000 30,000	{ (Struck farming community 7 miles north of Cushing.
2. June 9.....	7:30 p. m.....	Pottawatomie (E.).....	SE	10	440	0	0	{ 1 15,000 40,000	
3. June 9.....	11 p. m.....	Pushmataha (C.).....	SE	9	440	0	2	{ 1 500 3,000	
4. June 14.....	6 p. m.....	Grant (SE.).....	N	2	440	0	0	{ 1 25,000 20,000	

For footnotes see end of table.

TABLE 7.—Tornadoes of 1937, arranged by States—Continued

State, number, and date	Hour	County	Direction of advance	Length of path	Width of path	Killed	Injured	Property losses	Remarks
OKLAHOMA—CON.				Miles	Yards	Number	Number	Dollars	
5. June 9.....	4:30 p. m.....	Canadian (SE.) and Cleveland (NW.).	SSE	35	320	1	7	{ ¹ 25,000 30,000	Path not continuous; well-defined pendant, funnel-shaped cloud observed at all points affected; probably a series of tornadoes took place.
6. Oct. 8.....	7 p. m.....	Tillman (ext. SE.)	SE	½	300	0	1	{ ¹ 8,000 50,000	
OREGON									
1. June 16.....	9:22-9:35 a. m.....	Baker (NE.)	(²)	(²)	(²)	0	1	3,000	Funnel-shaped cloud observed; occurred at Halfway and vicinity.
PENNSYLVANIA									
1. June 14.....	4 p. m.....	Westmoreland (C.)	SE-NE	12	100-500	0	2	{ ¹ 15,000 85,000	Funnel-shaped cloud observed; path not continuous; greatest damage at Greensburg, Pleasant Unity, and Latrobe.
SOUTH CAROLINA									
1. Mar. 20.....	6:20 p. m.....	Cherokee (N.-C.)	NNE	4	20	0	7	{ ^(1 10) 50,000	Funnel-shaped cloud observed.
2. Mar. 20.....	7:20 p. m.....	York (N.)	NE	(⁷)	(⁵)	0	0	{ ^(1 10) 5,000	Do.
3. June 1.....	(²).....	Greenwood (ext. NW.).	E	(⁷)	(⁵)	0	0	{ ^(1 10) 3,000	Small tornado.
SOUTH DAKOTA									
1. May 2.....	2 p. m.....	Minnehaha	SE	(²)	(²)	0	0	1,000	Several small buildings wrecked.
2. May 17.....	9-9:15 p. m.....	Day (SE.) and Codington (N.).	SE	(²)	(⁹)	0	0	{ ¹ 1,000 99,000	No losses reported. Continued into Minnesota as No. 2.
3. May 17*.....	Near 10:30 p. m.....	Deuel (ext. E.)	SE	(⁷)	(⁵)	0	0	(³)	
4. June 12.....	11:30 p. m.....	Codington (Ext. NW.).	NE	(⁷)	67	0	0	{ ¹ 200 600	
5. July 12.....	7:45 p. m.....	Faulk (ext. SE.)	SE	1½	880	0	0	1,000	
TENNESSEE									
1. Apr. 24.....	12:30 p. m. (noon)	Giles (S.)	NE	7	300	0	3	6,350	
TEXAS									
1. May 1.....	6:45 p. m.....	Brooks (N.)	SE	(²)	(²)	1	1	{ ¹ 40,000 10,000	Damage to real property described as small.
2. June 8.....	4 p. m.....	Jack (N.)	SE	8	(²)	0	0	{ ¹ 80,000 25,500	
3. June 9.....	7 p. m.....	Young (N.)	N	8	100	0	0	¹ 500	
4. June 27.....	9:30 p. m.....	Tarrant (S.)	NE	(²)	150	0	0	(¹²)	
5. July 29.....	3:38 p. m.....	Hall (S.)	E	(²)	(²)	0	0	1,000	
6. Aug. 5.....	6:30 p. m.....	Karnes (C.)	W	5	1,200	0	0	{ ¹ 500 3,500	
7. Oct. 17.....	9:30 p. m.....	Jefferson (S.)	NE	¼	100	0	0	3,000	
VIRGINIA									
1. Feb. 21.....	10 p. m.....	Hanover (SE.)	NE	½	85	0	0	2,000	
WISCONSIN									
1. June 15.....	1:30 p. m.....	Columbia (S.)	(²)	(³)	(³)	0	0	(³)	Tornado aloft; did not reach earth's surface.
2. June 25.....	3:30 p. m.....	La Fayette (S.-C.)	SSE	8	100	0	0	10,000	Path not continuous; rural property damaged.
ALASKA									
1. Aug. 1 ¹³	Near noon.....	Northwest of Dillingham (town).	(¹)	(¹)	0	0	0	(¹)	Observer at Dillingham reported a small waterspout to the northwest of station.

* Denotes a State-boundary-crossing disturbance.

¹ Damage to crops.² Datum (a) unobtained.³ See adjoining remarks.⁴ Yards instead of miles.⁵ Estimate not obtained.⁶ Miles instead of yards.⁷ Short.⁸ Narrow.⁹ Wide.¹⁰ Damage occurred; no estimate obtained.¹¹ Several reported injured; definite figure not obtained.¹² Damage described as small.¹³ Not included in tables 4, 5, and 6.¹⁴ None reported.

HAIL, 1937

Information about damaging hail during the year 1937 was collected mainly through the regular and cooperative Weather Bureau stations and later assembled by the officials in charge at the various section centers. Special efforts were exerted to establish losses for the crop season (April to September, inclusive), also to separate crop losses from realty property losses. The aggregate loss for the year 1937 amounted to \$12,789,293; of that amount, nearly \$11,000,000 was damage to crops. The total estimated loss is probably too low, for in many cases the damage was described as "severe," "considerable," or amounting to "many thousands of dollars." Hail occurred somewhere in the United States every month of the year and losses were incurred in all months except January, October, November, and December.

Losses incurred by hailstorms in the United States prior to the crop season (April to September, inclusive) were, as usual, small; in February, Ohio and Georgia suffered small losses. Then, in March, Oklahoma reported \$500 damage to real property and \$3,000 to crops. During the 3 months following the crop season—October, November, and December—while hail was reported many times in several States, no damage was incurred.

LOSSES DURING THE CROP SEASON

During the crop season (6 months, April-September) the frequency of damaging hailstorms was quite high, and damage was correspondingly greater, due, in part, to the condition of vegetation and, in part, to the fact that in the summer months the distribution of atmospheric elements is conducive to the generation of severe thunderstorms essentially necessary to the formation of destructive hail.

The estimated property and crop losses for the season (April-September) amounted to \$12,785,793; June, with damage estimated at \$5,443,278, was the month with the greatest loss; July, second, with \$2,559,113; May, third, with \$2,396,710; and August, fourth, with \$2,172,679. Damage in April was estimated at \$148,425 and September \$34,834.

Damaging hail was reported in all States except Nevada, Maine, New Hampshire, Vermont, Rhode Island, New Jersey, Delaware, and the District of Columbia. In Alaska moderate to heavy hail fell at Hyder and Wrangell on April 12; at Petersburg on May 13; at Spencer on June 1; and at Cordova on September 11; no losses to property or crops were reported. The Territories of Puerto Rico, Hawaii, and the Virgin Islands reported no damaging hail.

From the standpoint of State comparison, five States suffered losses in excess of \$1,000,000: Oklahoma, \$2,542,400; Kansas, \$1,984,900; North Carolina, \$1,530,000; Texas, \$1,249,500; and Nebraska, \$1,101,000. The most singular destructive hailstorm of the year occurred on June 7, in the late afternoon, in Harmon County, Okla. This particular storm devastated a path diagonally across Harmon County from northwest to southeast. The area affected was approximately 6½ by 25 miles. Crop damage was estimated at \$750,000, and real property at \$500,000, making a total destruction of \$1,250,000.

Table 8 shows separate losses for property and crops by sections during the months of 1937; also similar aggregate totals for the 6 months (April to September, inclusive), and for the two 3-month periods preceding and following the crop season.

TABLE 8.—Losses from hailstorms during 1937

[In dollars]

State or section	January		February		March		April		May		June		July	
	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age
Alabama.....							2,000	0			100	2,500		
Alaska.....														
Arizona.....											0	50	0	200
Arkansas.....							17,000	2 3,000			0	9,000	(?)	21,500
California.....							0	(4)						
Colorado.....							(7 4)	(6)	(7 4)	(8)	(7 9)	(6)	70	(6)
District of Columbia.....								(8)						
Florida.....							(4)	25,000	(8)	189,000				
Georgia.....			0	(4)			(8)		(8)					
Hawaii.....														
Idaho.....											5,100	46,500	(4)	135,000
Illinois.....							51,100	0	57,530	11,900	500	3,000	400	54,300
Indiana.....									7,200	56,000	0	5,000		
Iowa.....							(4)	0	2 2,500	2 13,100	1,000	2 9,500	2 1,000	2 246,000
Kansas.....							2 3,700	(4)	100,500	989,000	2,500	601,500	14,000	273,500

For footnotes see end of table.

TABLE 8.—Losses from hailstorms during 1937—Continued

[In dollars]

State or section	January		February		March		April		May		June		July	
	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age
Kentucky									0	500			0	(³)
Louisiana							(⁸)	(⁸)	(⁸)	2 5,500			0	(⁴)
Maryland-Delaware ¹¹									75,000	0			0	0
Michigan									0	3,400	0	126,500	0	85,000
Minnesota							0	0	(¹⁴)	13 74,305	(¹⁴)	13 22,863	(¹⁴)	13 468,695
Mississippi							(¹⁸)	(¹⁸)						
Missouri							10 30,000	(⁹)			(⁸)	10 40,000	(⁸)	10 10,000
Montana											82,000	98,000	15,000	32,200
Nebraska							1,000	0	18,000	117,000	500	33,500	5,000	591,000
Nevada														
New England ¹⁶													200	0
New Jersey														
New Mexico							5,000	5,000	104,000	91,400	5,000	4,000	2,000	14,500
New York									(¹⁷)	20,000			(⁴)	(⁸)
North Carolina											12,000	465,000	1,000	255,000
North Dakota ¹⁷									(⁴)	25,000	500	40,000	(⁴)	159,418
Ohio			(⁴)						0	25,000	25,000	25,000	(³)	2 400
Oklahoma					500	3,000	1,000	500	23,000	2 292,900	720,000	1,505,000		
Oregon							25	100	0	25	25	5,350	100	4,600
Pennsylvania									2,000	5,000	5,000	17,500	0	16,000
South Carolina							2,000	0	(⁴)	(⁴)	500	828,890	0	1,000
South Dakota									1,000	1,000	5,500	2 69,000	8,000	11,000
Tennessee									(⁸)	3,000	(³)	(³)	(³)	(³)
Texas							500	1,500	5,000	75,000	307,500	329,000	(⁴)	10 7,000
Utah													0	(⁴)
Virginia									5,000	21,000	1,000	4,000	1,000	7,000
Washington													0	21,000
West Indies, Puerto Rico														
West Virginia									300	0	900	0	0	0
Wisconsin											0	500	200	28,000
Wyoming									650	1,000	4,950	26,550	6,600	62,300
Total ¹⁹			(²⁰)	(²⁰)	500	3,000	113,325	35,100	401,680	1,995,030	1,125,575	4,317,703	54,500	2,504,613

State or section	August		September		October		November		December		Crop season Apr.-Sept., inclusive		Period: Jan.- Mar. and Oct.- Dec., inclusive	
	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age
Alabama	1,500	75,500									3,600	78,000	0	0
Alaska											1 0	1 0	1 0	1 0
Arizona	0	50									0	300	0	0
Arkansas	0	10,000									17,000	43,500	0	0
California											0	(⁵)	0	0
Colorado	7 0	(⁶)	7 0	(⁶)							(⁴)	6 30,754	0	0
District of Columbia											0	0	0	0
Florida											(⁵)	(⁵)	0	0
Georgia											(⁵)	5 214,000	0	(⁵)
Hawaii											0	0	0	0
Idaho											5 5,100	181,500	0	0
Illinois	0	30,000									109,530	99,200	0	0
Indiana	10 2,000	(⁹)									5 9,200	6 61,000	0	0
Iowa	1,400	2 25,300									5 5,900	5 293,900	0	0
Kansas	0	200									5 120,700	1,864,200	0	0
Kentucky											0	500	0	0
Louisiana											(⁵)	5 5,500	0	0
Maryland-Delaware ¹¹	5,000	(⁴)									80,000	(⁵)	0	0
Michigan	0	31,500	0	600							12 0	247,000	0	0
Minnesota	(¹⁴)	13 5,716	0	0							(⁵)	5 571,579	0	0
Mississippi											(⁵)	(⁵)	0	0
Missouri	(¹⁶)	25,000									5 30,000	5 75,000	0	0
Montana	15,000	55,000	20,000	10,000							78,000	195,200	0	0
Nebraska	10,000	325,000									34,500	1,066,500	0	0
Nevada											0	0	0	0
New England ¹⁶	0	75,000									200	75,000	0	0
New Jersey											0	0	0	0
New Mexico											116,000	114,900	0	0
New York	5,000	5,000									5 5,000	5 25,000	0	0
North Carolina	2,000	785,000									25,000	1,505,000	0	0

For footnotes see end of table.

TABLE 8.—Losses from hailstorms during 1937—Continued

[In dollars]

State or section	August		September		October		November		December		Crop season Apr.-Sept., inclusive		Period: Jan.- Mar. and Oct.- Dec., inclusive	
	Prop- erty dam- age	Crop damage	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop damage	Prop- erty dam- age	Crop dam- age
North Dakota ¹⁷	(4)	44,288	(4)	634	-----	-----	-----	-----	-----	-----	\$ 500	¹⁷ 269,340	0	0
Ohio.....	0	(9)	-----	-----	-----	-----	-----	-----	-----	-----	\$ 25,000	\$ 25,400	(5)	0
Oklahoma.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	744,000	\$ 1,798,400	500	3,000
Oregon.....	0	100	-----	-----	-----	-----	-----	-----	-----	-----	150	10,175	0	0
Pennsylvania.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7,000	38,500	0	0
South Carolina.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	\$ 2,500	\$ 829,890	0	0
South Dakota.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	\$ 14,500	\$ 81,000	0	0
Tennessee.....	(3)	(3)	(3)	(4)	-----	-----	-----	-----	-----	-----	(3)	3,000	0	0
Texas.....	21,500	492,500	-----	-----	-----	-----	-----	-----	-----	-----	334,500	905,000	0	0
Utah.....	0	500	-----	-----	-----	-----	-----	-----	-----	-----	0	\$ 500	0	0
Virginia.....	5,000	95,000	-----	-----	-----	-----	-----	-----	-----	-----	12,000	127,000	0	0
Washington.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0	21,000	0	0
West Indies, Puerto Rico.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0	0	0	0
West Virginia.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1,200	0	0	0
Wisconsin.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	200	28,500	0	0
Wyoming.....	2,025	11,600	1,350	2,250	-----	-----	-----	-----	-----	-----	15,575	103,700	0	0
Total ¹⁹	80,425	2,092,254	21,350	13,484	-----	-----	-----	-----	-----	-----	1,796,855	10,988,938	500	3,000

NOTE.—Leaders in monthly columns indicate that no report of damage was received; however, this is not to be interpreted to mean that no hail occurred in that particular month.

¹ Moderate to heavy hail at various places in Alaska during April, May, June, and September; no damage reported.

² Additional losses occurred; no estimate obtained.

³ Losses occurred in month; however, no estimate of damage available.

⁴ Losses incurred reported to be small.

⁵ See appropriate monthly reference(s) for qualifying remarks.

⁶ Crop-hail losses for Colorado are not available by months, and the total loss here given, \$30,754, is the amount paid farmers by the Colorado State Hail Insurance Commission; only a small percentage of farmers (in Colorado) carry insurance, and those not covered by insurance, naturally, were not considered in the State's summation; therefore actual losses were greater than \$30,754.

⁷ Damage to real property estimated by Colorado Weather Bureau State section director.

⁸ Damage estimated as considerable; no definite monetary value secured.

⁹ Damage estimated to be several thousands; no definite monetary value received.

¹⁰ Additional damages incurred, described as considerable; no monetary estimate secured.

¹¹ No damaging hail reported in Delaware.

¹² Hail damage to real property in Michigan reported to be of little consequence by State section director.

¹³ Total hail-crop damage in Minnesota compiled by the Minnesota State Commissioner of Insurance, for the 1937 crop season, amounted to

\$571,579, which was apportioned as follows: April, none; May, 13 percent; June, 4 percent; July, 82 percent; August, 1 percent and September, none, based on intensity figures gathered by the Minnesota Weather Bureau section director.

¹⁴ Hail damage to real property in Minnesota believed to be small.

¹⁵ Losses reported as heavy; no monetary estimate obtained.

¹⁶ Only hail losses reported from New England section (comprised of States: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut) was \$200 in Massachusetts (July); \$75,000 in Massachusetts and Connecticut (August).

¹⁷ North Dakota: All figures for May and June and hail property losses for remaining months, are based on estimates collected by the North Dakota Weather Bureau State section director; in May the North Dakota State Insurance Department paid out \$24,595 to farmers for hail-crop damage. Hail-crop losses figures for July, August, and September are actual monthly losses paid out by the North Dakota State Insurance Department (collected estimates by the Weather Bureau section director, in these months, were considerably less). The total hail-crop indemnities paid out by the North Dakota State Insurance Department, June-September, inclusive, amounted to \$228,935; losses paid out by commercial hail-insurance companies and total losses suffered by the insured farmers could not be ascertained.

¹⁸ In Mississippi moderate to heavy hail occurred in April; no damage reported.

¹⁹ Sums do not include the three sections, Alaska, Hawaii, and the West Indies, which are outside the United States proper.

²⁰ See reference note(s) above.

LOSSES FROM WINDSTORMS, 1937

For the twenty-second consecutive year statistics have been collected, chiefly through field service officials of the Bureau, of the losses of property and life resulting from all classes of severe winds, in addition to those considered to have been tornadoes. Special efforts were put forth to break down windstorm damage into two classes—first, damage to property, and second, damage to crops. Table 9 shows the results by months, seasons and sections.

TABLE 9.—*Losses from windstorms, other than tornadoes, by months, seasons, and sections, 1937*

[In dollars]

Section	January		February		March		April		May		June		July	
	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Prop- erty dam- age	Crop dam- age	Property damage	Crop dam- age	Prop- erty dam- age	Crop dam- age
Alabama			86,000				100,000	(1)			200	(1)		
Alaska	(3)		29,000											
Arizona					280								9,300	
Arkansas					3,500						34,500	(4)	2,000	(4)
California			(1)	(1)										
Colorado	(5)	(5)	5,830	(5)	1,500	(7)	(7)	(7)	(7)	(7)	(1)			
District of Columbia							3,000		350	300	(5)	(7)	(1)	(1)
Florida														
Georgia			(7)											
Hawaii	5,050													
Idaho											400		1,000	150
Illinois			200				65,900	200	16,800		28,500	15,000	12,000	
Indiana			8,800				50,000		7,450		701,000	700,000	1,000	
Iowa							51,400		46,130	(6)	103,300	41,600	12,600	57,000
Kansas					3,500		1,000		84,300		27,000		70,800	
Kentucky					10,000				30,000		25,000			
Louisiana					(7)		30,000		21,500				(1)	
Maryland-Delaware ¹⁰							(1)		4,380	1,000				
Michigan											42,000	1,000	120,000	250,000
Minnesota							35,822	(12)	243,591	(12)	50,151	(12)	(1)	(12)
Mississippi			(1)				(1)	(1)	(1)	(1)				
Missouri							(5)	(7)			(1)	(1)	10,000	(7)
Montana	2,000		2,000						20,000	200,000	600			
Nebraska							20,000		8,000		2,000		3,000	8,000
Nevada														
New England ¹³													2,500	2,500
New Jersey							(4)						(4)	
New Mexico					3,000									
New York							(4)		(4)				20,000	
North Carolina			49,000											
North Dakota									6,000	6,000	20,000	20,000		
Ohio	25,000		60,000		500		25,000		110,000	(1)	2,000		(7)	(7)
Oklahoma									12,500	(1)	67,000	15,000	10,500	7,500
Oregon											5,000	5,000	30,000	
Pennsylvania									20,000		20,000	15,000		
South Carolina							5,000		300	100	22,000		5,600	5,500
South Dakota					500,000		225,000		65,000	(1)			38,400	2,000
Tennessee	1,800						9,000	(1)	8,500	(1)	900	(1)		
Texas	10,000						1,500	500			112,500	62,500		
Utah														
Virginia	300		36,000											
Washington			(1)						(1)		(7)	(7)	(1)	(1)
West Indies														
West Virginia							200							
Wisconsin									15,000		55,000			20,000
Wyoming	500								1,850				500	1,000
Total ¹⁴	39,600	(15)	247,830	(15)	521,780	500	622,822	700	721,651	207,400	1,319,051	875,100	349,200	353,650

¹ Damage reported as small.² See appropriate monthly reference (s).³ Damage incurred amounted to several thousand dollars.⁴ Losses occurred; no estimate obtained.⁵ Moderate amount of damage incurred; no monetary estimate obtained.⁶ Additional losses incurred; no estimate secured.⁷ Considerable damage occurred; no monetary estimate obtained.⁸ Losses amounted to several hundred dollars; no definite monetary figure obtained.⁹ Considerable damage occurred, in addition to the amount stated.¹⁰ No damaging winds reported in Delaware.

NOTE.—Leader in monthly columns indicates that no damaging winds were reported.

¹¹ Minnesota: The commissioner of insurance, State of Minnesota, reported hail cyclone losses (other than to growing crops) amounted to \$928,943; estimates gathered by the Weather Bureau State section director show that damage to real property from disturbances regarded to be tornadoes amounted to \$212,500, therefore \$928,943 less \$212,500, leaves a balance of \$716,443; believing hail damage to real property, if any, to be small, the amount \$716,443 was apportioned to windstorms (other than tornadoes) based on intensity figures gathered by the Weather Bureau State section director, as follows: April 5 percent, May 34 percent, June 7 percent, August 25 percent, and December 29 percent.

¹² No estimates obtained; however, damage believed to be small, if any.

¹³ New England section: Damaging winds (not tornadoes) occurred in Vermont and New Hampshire in July; in Maine and Vermont in August; in Connecticut during September; while in October and November, damaging winds were general throughout the section at times.

¹⁴ Totals do not include losses for the 3 climatic sections, Alaska, Hawaii, and the West Indies, which are outside the United States proper.

¹⁵ See reference notation (s) above.

TABLE 9.—Losses from windstorms, other than tornadoes, by months, seasons, and sections, 1937—Continued

[In dollars]

Section	August		September		October		November		December		Crop season, April-September, inclusive		Annual	
	Property damage	Crop damage	Property damage	Crop damage	Property damage	Crop damage	Property damage	Crop damage	Property damage	Crop damage	Property damage	Crop damage	Property damage	Crop damage
Alabama.....											100,200	(2)	186,200	(2)
Alaska.....							125,000						154,000	
Arizona.....	2,000										11,300		11,580	
Arkansas.....	11,250										47,750	(2)	51,250	(2)
California.....													(2)	(2)
Colorado.....					(5)	(5)					(2)	(2)	2 7,330	(2)
District of Columbia.....														
Florida.....	(1)	(1)	(1)	(1)							2 3,350	2 300	2 3,350	2 300
Georgia.....											(2)	(2)	(2)	(2)
Hawaii.....													5,050	
Idaho.....											1,400	150	1,400	150
Illinois.....	37,400	36,500	1,000								161,600	51,700	161,800	51,700
Indiana.....	12,000	10,000	10,000	2,000							781,450	712,000	790,250	712,000
Iowa.....	1,150	610,000									2 214,580	2 108,600	2 214,580	2 108,600
Kansas.....	6 3,500										2 186,600		2 190,100	
Kentucky.....	500						50,000				55,500		115,500	
Louisiana.....					10,000	5,000					2 51,500		2 51,500	5,000
Maryland-Delaware ¹⁰	30,000										2 34,380	1,000	2 34,380	1,000
Michigan.....	15,000				42,000						177,000	251,000	219,000	251,000
Minnesota.....	1179,111	(12)	(1)	(12)					11207,768		2 508,675	(2)	2 716,443	(2)
Mississippi.....											(2)	(2)	(2)	(2)
Missouri.....											2 10,000	(2)	2 10,000	(2)
Montana.....	36,000	(1)	5,000	5,000							61,600	2 205,000	65,600	2 205,000
Nebraska.....											33,000	8,000	33,000	8,000
Nevada.....														
New England ¹³	(7)	(7)	(5)		(7)		(7)				2 2,500	2 2,500	2 2,500	2 2,500
New Jersey.....											(2)		(2)	
New Mexico.....													3,000	
New York.....	(5)						(4)				2 20,000		2 20,000	
North Carolina.....	10,000	5,000									10,000	5,000	59,000	5,000
North Dakota.....	42,000	10,000									68,000	2 36,000	68,000	2 36,000
Ohio.....	6 500				2,000		32,500				2 137,500	(2)	2 257,000	2 500
Oklahoma.....											90,000	22,500	90,000	22,500
Oregon.....											35,000	5,000	35,000	5,000
Pennsylvania.....											40,000	15,000	40,000	15,000
South Carolina.....											32,900	5,600	32,900	5,600
South Dakota.....	65,975	12,600									394,375	2 14,600	894,375	2 14,600
Tennessee.....											18,400	(2)	20,200	(2)
Texas.....	6 89,000	610,000									2 203,000	2 73,000	2 213,000	2 73,000
Utah.....														
Virginia.....													36,300	
Washington.....											(2)	(2)	(2)	(2)
West Indies.....														
West Virginia.....											200		200	
Wisconsin.....					30,000						70,000	20,000	100,000	20,000
Wyoming.....									1,900		2,350	1,000	4,750	1,000
Total ¹⁴	535,386	94,100	16,000	7,000	84,000	5,000	82,500	0	209,668	0	3,564,110	1,537,950	4,749,488	1,543,450

For footnotes see opposite page.

Deaths and fire losses caused by lightning, also havoc and loss of life caused by floods of streams, are omitted from Table 9, even though high winds are a feature of the electrical storm that caused the downpour. When hail or beating rain, or both, accompanied these strong winds, or in the colder months sleet, glaze, or heavy snow aided in causing damage, an effort is made to estimate what share of the total loss was due to winds.

Table 10, following, gives for the various States and sections deaths and injuries attributed to windstorms other than tornadoes during the year 1937 on a monthly and annual basis. The total number of deaths caused by windstorms other than tornadoes during the year totaled 43, which is considerably below the 1936 figure of 121; similarly, the number injured in 1937 totaled 116 as against 266 in 1936.

TABLE 10.—Deaths and injuries caused by 1937 windstorms, other than tornadoes

State or section	January		Febru- ary		March		April		May		June		July		August		Septem- ber		October		Novem- ber		Decem- ber		Annual		
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	
Alabama			0	20			8	33			0	0													8	53	
Alaska	0	0	0	0																	0	0			0	0	
Arizona					0	0							1	0	0	0									1	0	
Arkansas					0	0					2	0	0	0	0	0									2	0	
California			0	0																					0	0	
Colorado	0	0	0	5	1	0	0	0	0	0	0	0							0	0					1	5	
District of Columbia							0	1	0	0			0	0	15	0	0	0							10	15	
Florida			0	0							1	0													1	0	
Georgia																									0	0	
Hawaii	0	0																							0	0	
Idaho											0	0	1	0											1	0	
Illinois			0	0			0	0	0	0	0	0	0	0	0	0									0	0	
Indiana			0	0			0	2	0	0	0	6	0	0	0	0	0	0							0	8	
Iowa							0	0	0	0	0	0	0	0	0	0									0	0	
Kansas					0	0	0	0	0	0	0	0	0	0	0	0									0	0	
Kentucky					0	0			0	0	0	0			0	0					0	1			0	1	
Louisiana					0	0	3	1	0	0			0	0					0	1					3	10	
Maryland-Delaware 2							0	0	0	0					0	4									0	4	
Michigan											1	5	0	0	0	0			0	3					1	8	
Minnesota							0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	
Mississippi			0	0			0	0	0	0															0	0	
Missouri							0	0			0	1	0	3											0	4	
Montana	0	0	0	0					0	1	0	0			0	3	1	0							1	4	
Nebraska							0	0	0	0	0	0	0	0											0	0	
Nevada																									0	0	
New England													0	(5)	0	0	0	0	0	0	0	0			0	(10)	
New Jersey							0	3					0	0											0	3	
New Mexico					0	0																			0	0	
New York							0	0	0	0			0	(3)	0	0					0	0			0	(10)	
North Carolina			0	4											0	0	0								0	4	
North Dakota									0	0	0	0			0	0									0	0	
Ohio	0	0	0	0	0	0	0	0	0	7	0	0	0	(9)	0	0			0	0	1	0	0	0	1	10	
Oklahoma									0	0	0	0	0	0	0										0	0	
Oregon											0	0	0	0											0	0	
Pennsylvania									0	0	0	0													0	0	
South Carolina							0	0	0	0	0	0	0	0											0	0	
South Dakota	0	0	6	1	0	7	2	0	1	(8)	0	0		0	1	0	2								4	10	
Tennessee	0	0							0	0	0	0													0	0	
Texas	3	2							0	0			0	4		1	3								4	9	
Utah																									0	0	
Virginia	0	0	0	0																					0	0	
Washington			0	0					0	0	0	0	0	0											0	0	
West Indies																									0	0	
West Virginia							0	0																	0	0	
Wisconsin									0	0	0	0	0	0											0	0	
Wyoming	0	0							0	0				0	0								0	0	0	0	
Total	3	2	10	1	29	10	3	0	12	10	4	0	8	4	16	2	10	4	12	1	0	0	4	1	1	0	0
																										43	116

¹ Additional number injured described as "several."² No damaging winds reported in Delaware.³ Several injured; no exact figure obtained.⁴ Death(s) by drowning attributed to strong winds.⁵ In July, 1 windstorm in Massachusetts reportedly injured several persons; no definite figure obtained.⁶ Death by exposure in blizzard.⁷ Includes 1 death due to exposure in blizzard.⁸ Several persons reported slightly injured; no definite figures obtained.⁹ Several reported injured; no definite figure obtained.¹⁰ See reference notation(s) in monthly column(s) for qualifying remarks.

NOTE.—Months in which no destructive windstorms were reported are leadered, and of course no deaths or injuries occurred.

Table 11, entitled "Deaths and property losses caused by windstorms other than tornadoes," shows the number of deaths and property losses (crops included) caused by windstorms other than tornadoes since 1916.

TABLE 11.—*Deaths and property losses caused by windstorms, other than tornadoes, 1916-37*

Year	Number of lives lost	Property and crop damage	Year	Number of lives lost	Property and crop damage
1916.....	65	\$11,712,125	1929.....	46	\$20,334,600
1917.....	25	1,400,550	1930.....	49	5,706,000
1918.....	79	7,602,200	1931.....	17	7,773,000
1919.....	344	28,170,760	1932.....	306	42,657,360
1920.....	42	4,735,400	1933.....	156	65,604,100
1921.....	65	13,174,650	1934.....	109	19,497,173
1922.....	133	5,055,800	1935.....	461	17,191,000
1923.....	68	5,261,800	1936.....	121	17,256,265
1924.....	78	13,545,750	1937.....	43	6,292,938
1925.....	88	11,612,380			
1926.....	357	93,610,250	Total.....	4,664	493,813,261
1927.....	64	6,783,160			
1928.....	1,947	88,836,000	Average.....	212	22,446,057

SUNSHINE, 1937

Table 12 gives for 166 stations the monthly amounts of sunshine and percentage of the possible, as derived from the automatic records made by an instrument designated the "thermo-metric recorder," illustrated in preceding volumes of this series.

This instrument does not record satisfactorily the duration of sunshine for about 1 hour after sunrise and for about 1 hour before sunset, and on this account it has been considered necessary to apply to the record for these hours what has been designated a "twilight correction." The amount of this correction is found by noting the comparative clearness of the sky during the time that elapses between the hour of sunrise and the moment the instrument begins to record and between the time the instrument ceases to act and the hour of sunset.

The average cloudiness of the whole sky is determined by numerous personal observations at all stations during the daytime, and is given in the column "Daylight" under "Cloudiness" in the tables of Climatology, pages 44 to 137.

TABLE 12.—Monthly amounts and percentage of sunshine, 1937

Station	January		February		March		April		May		June	
	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble
Albany, N. Y.	105	36	138	47	162	44	177	44	264	58	289	63
Albuquerque, N. Mex.	247	79	235	77	286	77	353	90	361	83	369	85
Alpena, Mich.	105	37	122	42	215	58	184	45	322	70	318	68
Amarillo, Tex.	182	58	164	53	214	58	274	70	295	68	319	73
Apalachicola, Fla.	170	52	195	62	258	69	285	74	346	82	307	73
Asheville, N. C.	66	21	133	44	250	67	235	60	340	78	311	71
Atlanta, Ga.	57	18	151	49	257	69	262	67	332	77	330	77
Atlantic City, N. J.	45	15	127	42	200	54	207	52	317	71	247	55
Augusta, Ga.	90	28	182	59	259	70	274	70	339	79	338	79
Austin, Tex.	45	14	179	57	196	53	273	71	307	73	314	74
Baker, Oreg.	131	46	146	50	199	54	211	52	347	75	293	63
Baltimore, Md.	81	27	158	53	253	68	216	54	337	76	297	67
Binghamton, N. Y.	82	28	128	43	142	38	148	37	266	59	235	52
Birmingham, Ala.	71	23	163	53	258	69	288	74	324	75	328	76
Bismarck, N. Dak.	135	48	185	64	179	48	169	41	259	56	290	61
Block Island, R. I.	82	28	156	52	215	58	205	51	244	54	230	51
Boise, Idaho.	119	41	121	41	224	61	249	62	360	79	357	77
Boston, Mass.	121	41	163	55	236	64	208	52	244	54	241	53
Brownsville, Tex.	61	18	142	45	127	34	261	68	326	78	334	81
Buffalo, N. Y.	90	31	130	44	190	51	190	47	293	64	306	67
Burlington, Vt.	76	26	108	37	160	43	194	48	251	55	276	60
Canton, N. Y.	79	28	127	43	195	53	170	42	239	52	263	56
Cape Henry, Va.	55	18	126	42	218	59	226	57	360	82	261	59
Charles City, Iowa.	174	60	178	60	236	64	159	40	308	68	297	65
Charleston, S. C.	132	42	175	57	274	74	282	72	362	84	312	73
Charlotte, N. C.	62	20	145	47	272	73	258	66	364	84	313	72
Chattanooga, Tenn.	74	24	137	45	224	60	221	56	308	71	303	70
Cheyenne, Wyo.	199	67	187	63	201	54	238	59	230	51	234	52
Chicago University, Ill.	126	43	165	56	208	56	192	48	315	70	306	67
Cincinnati, Ohio.	95	31	138	46	208	56	200	50	278	63	297	67
Cleveland, Ohio.	75	25	100	34	172	46	200	50	312	69	300	66
Columbia, Mo.	121	40	178	59	202	54	195	49	270	61	273	61
Columbus, Ohio.	65	22	105	35	177	48	215	54	270	60	255	57
Concordia, Kans.	178	59	182	61	214	58	276	69	324	73	341	76
Dallas, Tex.	66	21	209	68	204	55	289	74	311	72	316	74
Davenport, Iowa.	123	42	163	55	202	55	161	40	288	64	324	71
Del Rio, Tex.	100	31	165	53	186	50	286	74	238	57	293	70
Denver, Colo.	249	83	234	78	244	66	274	69	253	57	282	63
Des Moines, Iowa.	177	60	174	59	195	53	187	47	293	65	327	72
Detroit, Mich.	122	41	164	55	240	65	195	49	275	61	282	62
Devils Lake, N. Dak.	192	70	217	76	244	66	204	50	315	67	343	72
Dodge City, Kans.	174	57	176	58	223	60	284	72	292	66	310	70
Dubuque, Iowa.	126	43	151	51	201	54	152	38	301	67	321	71
Duluth, Minn.	137	49	148	51	282	76	173	42	277	59	306	64
Eastport, Maine.	142	50	130	45	190	51	187	46	201	44	195	42
Elkins, W. Va.	98	32	118	39	192	52	191	48	267	60	211	47
El Paso, Tex.	245	76	229	74	277	75	367	94	371	87	380	89
Erie, Pa.	58	20	91	31	164	44	175	44	259	57	263	58
Escanaba, Mich.	128	45	155	54	246	66	190	47	313	68	315	67
Eureka, Calif.	140	47	105	35	135	36	218	54	258	57	185	41
Evansville, Ind.	61	20	136	45	182	49	207	52	316	72	312	70
Fairbanks, Alaska.	42	26	91	38	267	73	264	58	400	69	390	60
Fort Smith, Ark.	66	21	171	56	195	53	223	57	269	62	304	70
Fort Wayne, Ind.	110	37	128	43	180	48	203	51	300	67	270	60
Fort Worth, Tex.	58	12	198	64	178	48	262	67	282	66	313	73

TABLE 12.—*Monthly amounts and percentage of sunshine, 1937—Continued*

Station	July		August		September		October		November		December		Annual	
	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble
Albany, N. Y.	344	74	281	65	232	62	138	40	76	26	124	44	2,330	50
Albuquerque, N. Mex.	394	89	324	78	291	78	294	84	291	94	240	79	3,685	83
Alpena, Mich.	333	71	293	67	199	53	92	27	59	21	68	25	2,310	49
Amarillo, Tex.	349	79	282	68	253	68	225	64	149	48	152	50	2,858	63
Apalachicola, Fla.	260	61	214	52	210	57	194	55	202	63	218	69	2,859	64
Asheville, N. C.	322	73	276	66	261	70	151	43	180	59	117	39	2,642	58
Atlanta, Ga.	328	75	258	62	265	71	189	54	189	60	176	57	2,794	61
Atlantic City, N. J.	308	68	287	68	267	72	198	57	190	63	152	52	2,545	56
Augusta, Ga.	321	73	327	79	311	84	250	71	241	77	227	73	3,159	70
Austin, Tex.	350	81	356	87	293	79	287	81	211	66	79	25	2,890	63
Baker, Oreg.	428	91	394	91	302	80	232	68	109	38	98	36	2,890	62
Baltimore, Md.	328	72	277	65	271	73	188	54	202	67	153	52	2,761	61
Binghamton, N. Y.	203	44	176	41	185	49	117	34	86	29	101	35	1,869	41
Birmingham, Ala.	313	71	243	59	250	67	202	58	168	54	140	45	2,748	60
Bismarek, N. Dak.	302	63	271	62	232	62	170	51	119	42	106	40	2,417	53
Block Island, R. I.	336	73	261	61	261	70	202	59	178	60	159	55	2,529	56
Boise, Idaho.	411	88	419	97	330	88	258	76	112	39	120	43	3,080	66
Boston, Mass.	309	67	257	60	259	69	162	47	141	48	150	53	2,491	55
Brownsville, Tex.	284	67	332	82	261	71	254	71	173	53	132	41	2,687	59
Buffalo, N. Y.	327	70	312	72	246	66	137	40	107	36	78	28	2,406	51
Burlington, Vt.	326	70	290	67	219	58	116	34	58	20	133	48	2,207	47
Canton, N. Y.	302	64	278	64	226	60	94	28	70	25	129	47	2,172	47
Cape Henry, Va.	260	58	271	64	244	66	175	50	185	61	153	51	2,534	56
Charles City, Iowa.	368	79	329	76	272	73	179	52	169	58	98	35	2,767	61
Charleston, S. C.	279	64	283	68	213	57	209	60	231	74	222	72	2,974	66
Charlotte, N. C.	306	69	247	59	249	67	182	52	208	67	141	46	2,747	60
Chattanooga, Tenn.	332	75	263	63	253	68	184	53	153	49	138	45	2,590	57
Cheyenne, Wyo.	285	62	274	64	232	62	248	72	165	56	128	45	2,621	59
Chicago University, Ill.	379	82	340	79	266	71	175	51	194	66	103	36	2,769	60
Cincinnati, Ohio.	357	79	310	73	296	79	177	51	135	45	97	33	2,588	56
Cleveland, Ohio.	338	73	303	71	245	66	120	35	117	40	74	26	2,356	50
Columbia, Mo.	344	76	317	75	272	73	199	58	185	61	89	30	2,645	58
Columbus, Ohio.	324	71	278	65	262	70	158	46	104	35	91	31	2,304	50
Concordia, Kans.	402	88	375	88	308	82	230	67	190	64	180	62	3,200	71
Dallas, Tex.	312	71	276	67	257	69	226	64	163	52	67	21	2,696	59
Davenport, Iowa.	369	80	299	70	280	75	138	40	190	65	94	33	2,631	58
Del Rio, Tex.	313	73	335	82	260	70	268	76	207	64	96	30	2,747	61
Denver, Colo.	307	67	297	70	270	72	230	67	193	65	127	44	2,960	67
Des Moines, Iowa.	350	76	352	82	314	84	209	61	179	61	124	44	2,881	64
Detroit, Mich.	314	68	319	74	248	66	95	28	101	34	58	20	2,413	52
Devils Lake, N. Dak.	305	63	312	71	222	59	162	48	128	46	140	53	2,784	62
Dodge City, Kans.	371	82	343	81	282	76	243	70	218	72	187	63	3,103	69
Dubuque, Iowa.	396	86	338	79	278	74	155	45	173	59	72	25	2,664	58
Duluth, Minn.	325	68	308	70	204	54	121	36	125	45	106	40	2,512	54
Eastport, Maine.	294	62	254	58	212	56	154	46	82	29	102	37	2,143	47
Elkins, W. Va.	274	60	233	55	229	61	129	37	130	43	105	36	2,177	48
El Paso, Tex.	378	87	350	85	280	75	294	83	276	87	182	58	3,629	81
Erie, Pa.	280	61	263	61	198	53	98	28	91	31	41	15	1,981	42
Escanaba, Mich.	327	69	287	66	196	52	126	37	113	40	79	29	2,475	53
Eureka, Calif.	273	60	279	65	158	42	174	51	108	36	118	41	2,151	47
Evansville, Ind.	338	75	305	72	275	74	201	58	141	46	75	25	2,549	55
Fairbanks, Alaska.	338	54	147	29	158	40	168	56	81	43	58	47	2,404	49
Fort Smith, Ark.	277	63	232	56	219	59	227	65	106	34	84	27	2,373	50
Fort Wayne, Ind.	352	77	319	75	267	71	148	43	118	40	63	22	2,458	53
Fort Worth, Tex.	323	74	289	70	263	71	247	70	191	61	73	23	2,677	58

TABLE 12.—*Monthly amounts and percentage of sunshine, 1937—Continued*

Station	January		February		March		April		May		June	
	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble
Fresno, Calif.....	181	59	183	60	250	67	352	89	415	94	410	93
Galveston, Tex.....	70	22	119	38	138	37	249	64	331	78	268	64
Grand Junction, Colo.....	183	60	172	57	244	66	264	67	305	69	347	78
Grand Rapids, Mich.....	92	32	120	41	222	60	201	50	328	72	309	67
Green Bay, Wis.....	120	42	130	44	232	63	156	39	237	51	243	52
Greensboro, N. C.....	46	15	146	48	270	73	214	54	333	76	275	63
Harrisburg, Pa.....	53	18	137	46	210	56	209	52	352	79	317	71
Hartford, Conn.....	94	32	161	54	200	54	202	50	276	61	253	56
Havre, Mont.....	188	69	226	79	238	64	305	74	355	75	339	70
Helena, Mont.....	146	52	163	56	202	55	258	63	342	73	256	54
Honolulu, Hawaii.....	212	62	161	50	199	53	242	64	260	64	271	67
Houston, Tex.....	34	11	120	38	136	36	229	59	325	77	285	68
Huron, S. Dak.....	170	59	189	64	220	60	207	51	318	69	328	71
Indianapolis, Ind.....	80	26	142	48	207	56	191	48	295	66	286	64
Ithaca, N. Y.....	92	31	144	49	177	48	191	47	264	58	260	57
Jacksonville, Fla.....	152	47	170	55	251	68	289	75	321	76	306	73
Juneau, Alaska.....	79	35	78	30	99	27	129	30	155	30	218	40
Kalispell, Mont.....	81	29	104	36	225	61	152	37	364	77	303	63
Kansas City, Mo.....	151	50	189	63	222	60	248	62	330	74	310	69
Keokuk, Iowa.....	123	41	180	60	219	59	188	47	312	70	335	75
Key West, Fla.....	259	78	211	67	264	71	264	69	295	71	241	59
Knoxville, Tenn.....	82	26	132	43	228	61	241	61	324	74	341	78
La Crosse, Wis.....	156	54	179	61	266	72	196	48	329	72	365	79
Lander, Wyo.....	211	72	196	66	217	59	243	60	317	70	302	66
Lansing, Mich.....	90	31	110	37	189	51	170	42	251	55	255	56
Lincoln, Nebr.....	189	63	185	62	204	55	255	64	346	77	322	71
Little Rock, Ark.....	56	18	169	55	232	62	283	72	341	79	347	80
Los Angeles, Calif.....	223	71	177	58	270	73	321	82	227	53	321	74
Louisville, Ky.....	75	24	154	51	208	56	196	49	278	63	294	66
Lynchburg, Va.....	78	25	154	51	274	74	241	61	352	80	316	72
Macon, Ga.....	64	20	168	54	255	69	277	71	346	80	334	78
Madison, Wis.....	155	53	185	63	259	70	176	44	297	65	317	69
Marquette, Mich.....	86	31	110	38	189	51	148	36	276	59	267	56
Memphis, Tenn.....	32	10	144	47	192	52	232	59	282	65	274	63
Meridian, Miss.....	25	8	146	47	197	53	260	67	303	71	250	59
Miami, Fla.....	227	68	188	60	230	62	238	62	316	76	212	51
Miles City, Mont.....	127	45	160	55	234	63	262	64	342	74	333	71
Milwaukee, Wis.....	126	43	170	58	238	64	173	43	310	68	311	68
Minneapolis-St. Paul, Minn.....	180	63	168	58	237	64	183	45	312	68	300	64
Missoula, Mont.....	79	28	94	33	192	52	184	45	342	73	276	58
Mobile, Ala.....	105	32	151	49	238	64	285	73	351	82	277	65
Modena, Utah.....	216	71	209	69	248	67	286	72	358	81	384	87
Nashville, Tenn.....	55	18	157	51	252	68	249	63	305	70	337	77
New Haven, Conn.....	104	35	174	59	212	57	231	58	319	71	262	58
New Orleans, La.....	104	32	136	44	220	59	300	78	350	83	263	62
New York, N. Y.....	105	35	159	53	209	56	227	57	333	74	277	61
Nome, Alaska.....	39	24	107	45	267	73	271	60	329	57	315	49
Norfolk, Va.....	60	19	137	45	256	69	265	67	383	87	341	78
Northfield, Vt.....	100	34	141	48	183	50	166	41	207	45	205	44
North Head, Wash.....	81	29	51	18	66	18	100	25	191	41	161	34
North Platte, Nebr.....	195	65	201	67	200	54	269	67	298	66	252	56
Oklahoma City, Okla.....	120	38	206	67	234	63	310	79	328	75	335	77
Omaha, Nebr.....	186	62	196	66	208	56	235	59	354	79	343	76
Oswego, N. Y.....	63	22	98	33	154	42	185	46	273	60	292	64
Parkersburg, W. Va.....	62	20	93	31	187	50	196	49	304	68	278	62

TABLE 12.—*Monthly amounts and percentage of sunshine, 1937*—Continued

Station	July		August		September		October		November		December		Annual	
	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble
Fresno, Calif.	421	94	419	100	366	98	318	91	229	75	158	53	3,702	81
Galveston, Tex.	287	67	263	65	263	71	266	75	197	61	97	30	2,548	56
Grand Junction, Colo.	303	67	310	73	275	74	281	81	200	66	129	44	3,013	67
Grand Rapids, Mich.	366	79	343	80	262	70	150	44	130	45	66	24	2,589	55
Green Bay, Wis.	317	67	301	69	198	53	116	34	116	40	63	23	2,229	48
Greensboro, N. C.	296	67	267	64	234	63	185	53	199	65	147	49	2,612	58
Harrisburg, Pa.	376	83	289	68	262	70	156	45	147	49	154	53	2,662	58
Hartford, Conn.	328	71	257	60	258	69	177	52	144	49	141	49	2,491	55
Havre, Mont.	355	73	360	81	264	70	195	58	129	47	139	54	3,093	68
Helena, Mont.	369	77	371	84	250	66	218	65	122	44	97	36	2,794	60
Honolulu, Hawaii	274	67	223	56	261	71	234	65	239	72	209	62	2,785	63
Houston, Tex.	318	74	254	62	238	64	242	68	130	41	80	25	2,391	52
Huron, S. Dak.	402	86	339	78	285	76	197	58	148	51	129	47	2,932	64
Indianapolis, Ind.	362	80	343	81	295	79	184	53	155	52	91	31	2,631	57
Ithaca, N. Y.	324	70	274	64	232	62	101	30	106	36	100	35	2,265	49
Jacksonville, Fla.	224	52	248	61	192	52	181	51	192	60	213	67	2,739	61
Juneau, Alaska	97	18	128	27	101	26	58	18	86	36	60	30	1,288	29
Kalispell, Mont.	416	86	341	77	270	72	149	45	61	22	22	8	2,488	51
Kansas City, Mo.	353	78	339	80	305	82	223	64	190	63	122	42	2,982	66
Keokuk, Iowa	369	81	333	78	312	84	197	57	185	62	87	30	2,840	62
Key West, Fla.	270	64	293	73	246	67	258	72	198	60	190	58	2,989	67
Knoxville, Tenn.	324	73	277	66	261	70	166	48	150	49	119	39	2,645	57
La Crosse, Wis.	418	89	363	84	284	76	174	51	145	50	89	32	2,964	64
Lander, Wyo.	296	64	327	76	271	72	264	77	158	54	136	48	2,938	65
Lansing, Mich.	306	66	291	68	210	56	142	42	103	35	54	19	2,171	46
Lincoln, Nebr.	393	86	364	85	276	74	221	64	173	58	161	56	3,089	68
Little Rock, Ark.	324	73	283	68	264	71	231	66	155	50	87	28	2,772	60
Los Angeles, Calif.	327	74	333	80	292	79	286	81	240	77	235	76	3,252	72
Louisville, Ky.	352	78	281	67	265	71	153	44	121	40	92	31	2,469	53
Lynchburg, Va.	282	63	235	56	249	67	176	50	204	67	143	48	2,704	60
Macon, Ga.	307	70	296	72	274	74	232	66	206	66	205	66	2,964	66
Madison, Wis.	375	81	299	69	243	65	159	47	179	61	81	29	2,725	60
Marquette, Mich.	261	54	254	58	150	40	66	20	90	32	36	14	1,933	41
Memphis, Tenn.	251	57	257	62	190	51	210	60	152	49	69	23	2,285	50
Meridian, Miss.	306	71	228	55	239	64	188	53	161	51	110	35	2,413	53
Miami, Fla.	262	62	239	59	208	56	251	70	194	59	156	48	2,721	61
Miles City, Mont.	360	76	357	82	244	65	243	72	144	51	127	47	2,933	64
Milwaukee, Wis.	384	82	344	80	272	73	138	40	186	64	74	26	2,726	59
Minneapolis-St. Paul, Minn.	383	81	311	71	252	67	159	47	126	44	104	38	2,715	59
Missoula, Mont.	375	78	352	80	266	71	204	60	73	26	26	10	2,463	51
Mobile, Ala.	339	78	250	61	238	64	215	61	173	54	160	51	2,782	61
Modena, Utah	322	72	371	88	316	85	303	87	272	90	207	70	3,492	78
Nashville, Tenn.	343	77	328	79	290	78	201	58	169	55	144	48	2,830	62
New Haven, Conn.	349	76	288	67	289	77	218	63	192	65	168	59	2,806	62
New Orleans, La.	299	70	261	64	246	66	223	63	192	60	153	48	2,747	62
New York, N. Y.	330	72	259	61	257	69	185	54	196	66	145	50	2,682	59
Nome, Alaska	288	46	206	40	112	28	139	46	79	41	62	48	2,214	46
Norfolk, Va.	297	66	283	67	260	70	191	55	178	58	159	53	2,810	61
Northfield, Vt.	267	57	218	50	174	47	102	30	66	23	134	48	1,963	43
North Head, Wash.	209	44	188	43	142	38	119	35	39	14	16	6	1,363	29
North Platte, Nebr.	375	82	344	81	259	69	226	66	215	72	208	72	3,042	68
Oklahoma City, Okla.	339	77	323	77	282	76	242	69	175	57	125	41	3,019	66
Omaha, Nebr.	393	86	382	89	307	82	223	65	168	57	144	50	3,139	69
Oswego, N. Y.	349	75	296	69	206	55	84	24	50	17	77	27	2,127	44
Parkersburg, W. Va.	332	73	273	64	251	67	140	41	81	27	92	32	2,289	49

TABLE 12.—*Monthly amounts and percentage of sunshine, 1937—Continued*

Station	January		February		March		April		May		June	
	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble
Pensacola, Fla.....	116	36	141	45	219	59	278	72	339	80	272	64
Peoria, Ill.....	133	45	170	57	212	57	187	47	324	72	326	72
Philadelphia, Pa.....	78	26	152	51	211	57	214	54	331	74	277	62
Phoenix, Ariz.....	248	78	225	73	308	83	371	95	396	92	389	91
Pittsburgh, Pa.....	120	40	147	49	200	54	230	58	306	68	315	70
Pocatello, Idaho.....	112	38	138	47	215	58	202	50	339	75	330	72
Port Arthur, Tex.....	65	20	125	40	157	42	232	73	374	88	313	74
Portland, Maine.....	120	41	163	56	230	62	213	53	264	58	252	54
Portland, Oreg.....	119	42	74	26	136	37	147	36	296	64	266	56
Providence, R. I.....	102	35	174	59	238	64	200	50	268	59	245	54
Pueblo, Colo.....	261	85	234	78	224	60	309	78	318	72	330	75
Raleigh, N. C.....	39	12	137	45	255	69	228	58	342	78	294	67
Rapid City, S. Dak.....	162	56	201	68	227	61	266	66	308	67	333	72
Reading, Pa.....	83	28	144	48	208	56	196	49	291	65	227	51
Richmond, Va.....	45	15	147	49	257	69	235	59	343	78	285	64
Rochester, N. Y.....	101	34	150	51	175	47	180	45	269	59	275	60
Roseburg, Oreg.....	80	27	35	12	84	23	119	30	237	52	208	45
Roswell, N. Mex.....	219	69	216	70	261	70	342	88	313	73	378	88
Sacramento, Calif.....	161	53	158	53	221	59	318	80	417	94	404	91
St. Joseph, Mo.....	163	54	182	61	179	48	218	55	288	65	296	66
St. Louis, Mo.....	107	35	138	46	189	51	220	55	302	68	271	61
Salt Lake City, Utah.....	159	53	165	55	287	77	305	76	342	76	337	75
San Antonio, Tex.....	45	14	156	50	155	42	248	64	271	64	300	72
San Diego, Calif.....	197	62	177	57	248	67	316	81	243	57	287	67
Sandy Hook, N. J.....	81	27	141	47	210	57	220	55	328	74	284	63
San Francisco, Calif.....	205	67	198	66	250	67	320	81	380	86	303	68
San Jose, Calif.....	162	52	152	50	182	49	280	71	364	83	310	70
San Juan, P. R.....	199	54	196	60	262	70	256	68	216	54	241	61
Sante Fe, N. Mex.....	219	70	222	73	254	68	326	83	328	75	342	78
Sault Ste. Marie, Mich.....	36	13	86	30	201	54	173	42	283	61	280	59
Savannah, Ga.....	98	31	151	49	239	64	283	73	330	77	272	64
Seranton, Pa.....	88	29	126	42	159	43	194	48	315	70	276	61
Seattle, Wash.....	108	39	96	34	140	38	131	32	232	49	227	47
Sheridan, Wyo.....	151	53	170	58	216	58	282	69	333	72	305	65
Sioux City, Iowa.....	160	54	183	62	209	56	192	48	308	68	332	73
Spokane, Wash.....	136	49	142	50	225	61	181	44	338	72	261	55
Springfield, Ill.....	128	43	161	54	207	56	184	46	301	67	307	68
Springfield, Mo.....	111	36	163	54	212	57	226	57	304	69	281	64
Syracuse, N. Y.....	83	28	132	45	148	40	172	43	268	59	258	56
Tampa, Fla.....	234	71	185	59	251	67	268	70	310	74	282	68
Tatoosh Island, Wash.....	104	38	74	25	110	30	114	28	234	50	209	44
Terre Haute, Ind.....	108	36	156	52	205	55	174	44	291	65	300	67
Toledo, Ohio.....	100	34	118	40	168	45	175	44	257	57	231	51
Trenton, N. J.....	93	31	168	56	224	60	237	59	344	77	304	68
Valentine, Nebr.....	169	58	210	71	197	53	255	63	314	69	311	68
Vicksburg, Miss.....	43	14	137	44	190	51	263	68	357	83	308	72
Walla Walla, Wash.....	82	29	73	25	179	48	193	47	362	78	309	66
Washington, D. C.....	87	29	158	52	238	64	225	57	302	68	222	50
Wichita, Kans.....	136	44	191	63	231	62	308	78	304	69	335	76
Williston, N. Dak.....	183	66	194	68	256	69	218	53	305	65	356	74
Wilmington, N. C.....	97	31	170	55	278	75	280	72	370	86	331	77
Winnemucca, Nev.....	127	43	141	47	165	44	230	58	317	71	283	63
Wytheville, Va.....	70	23	121	40	178	48	192	49	297	68	236	54
Yakima, Wash.....	136	49	122	42	174	47	262	64	360	77	241	51
Yellowstone Park, Wyo.....	135	47	144	49	230	62	200	49	331	72	268	57
Yuma, Ariz.....	271	85	255	83	331	89	380	97	410	95	420	98

TABLE 12.—Monthly amounts and percentage of sunshine, 1937—Continued

Station	July		August		September		October		November		December		Annual	
	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble	Hours	Per- cent- age of possi- ble
Pensacola, Fla.....	291	68	210	51	221	60	223	63	202	63	190	60	2,702	60
Peoria, Ill.....	398	87	350	82	312	83	185	54	190	64	86	30	2,873	62
Philadelphia, Pa.....	303	67	246	58	248	66	175	51	181	61	136	47	2,552	56
Phoenix, Ariz.....	374	86	344	83	316	85	307	87	257	82	216	70	3,751	84
Pittsburgh, Pa.....	325	71	305	71	252	68	120	35	115	39	100	35	2,535	55
Pocatello, Idaho.....	352	76	359	83	303	81	278	81	122	42	90	32	2,840	61
Port Arthur, Tex.....	314	73	281	69	261	70	263	74	219	69	102	32	2,756	60
Portland, Maine.....	346	74	312	72	262	70	181	53	114	39	170	61	2,627	58
Portland, Oreg.....	353	74	299	68	216	58	171	50	56	20	77	29	2,210	47
Providence, R. I.....	305	66	239	56	252	67	178	52	147	50	157	55	2,505	56
Pueblo, Colo.....	360	80	325	77	274	74	246	71	234	77	193	65	3,308	74
Raleigh, N. C.....	264	59	251	60	240	64	167	48	182	59	157	52	2,556	56
Rapid City, S. Dak.....	371	79	371	86	256	68	198	58	110	38	147	53	2,950	64
Reading, Pa.....	254	56	234	55	245	66	127	37	139	46	130	45	2,278	50
Richmond, Va.....	261	58	229	54	247	66	185	53	204	67	141	48	2,579	57
Rochester, N. Y.....	314	68	312	72	227	61	118	34	77	26	67	24	2,265	48
Roseburg, Oreg.....	370	80	357	83	219	58	130	38	37	13	55	20	1,931	40
Roswell, N. Mex.....	390	89	350	85	302	81	289	82	257	82	193	62	3,510	78
Sacramento, Calif.....	444	98	415	98	358	96	283	82	171	57	146	50	3,496	76
St. Joseph, Mo.....	355	78	327	77	282	75	232	67	192	64	129	44	2,843	63
St. Louis, Mo.....	313	69	288	68	254	68	200	58	183	61	80	27	2,545	56
Salt Lake City, Utah.....	326	71	362	85	317	85	259	75	167	56	157	55	3,183	70
San Antonio, Tex.....	310	73	340	83	294	79	282	79	236	73	83	26	2,720	60
San Diego, Calif.....	276	63	266	64	267	72	262	74	214	68	206	66	2,959	66
Sandy Hook, N. J.....	338	74	271	64	273	73	190	55	187	63	135	46	2,658	58
San Francisco, Calif.....	268	59	309	73	234	63	220	63	143	47	172	58	3,002	66
San Jose, Calif.....	393	88	378	90	318	85	259	74	211	69	195	65	3,204	70
San Juan, P. R.....	272	67	233	59	275	75	258	71	218	64	229	67	2,855	64
Sante Fe, N. Mex.....	357	80	332	79	309	83	294	84	263	85	214	71	3,460	77
Sault Ste. Marie, Mich.....	298	63	318	73	179	48	60	18	56	20	34	13	2,004	41
Savannah, Ga.....	235	54	216	52	172	46	179	51	194	61	190	61	2,559	57
Scranton, Pa.....	292	64	260	61	246	66	150	44	156	52	110	38	2,372	52
Seattle, Wash.....	317	66	210	48	180	48	121	36	59	21	36	14	1,857	39
Sheridan, Wyo.....	354	75	370	85	285	76	241	71	120	42	92	33	2,919	63
Sioux City, Iowa.....	384	83	359	84	306	82	228	67	186	63	147	52	2,994	66
Spokane, Wash.....	396	82	328	74	295	78	191	57	52	19	53	20	2,598	55
Springfield, Ill.....	361	79	317	74	290	78	191	55	181	61	85	29	2,713	59
Springfield, Mo.....	322	72	310	74	253	68	208	60	163	53	97	32	2,650	58
Syracuse, N. Y.....	327	70	275	64	236	63	119	35	82	28	87	31	2,187	47
Tampa, Fla.....	236	55	240	59	218	59	214	60	199	62	220	68	2,857	64
Tatoosh Island, Wash.....	244	50	216	49	158	42	131	39	64	23	78	30	1,736	37
Terre Haute, Ind.....	364	80	320	76	295	79	182	53	159	53	96	33	2,650	58
Toledo, Ohio.....	291	63	265	62	250	67	133	39	109	37	83	29	2,180	47
Trenton, N. J.....	339	74	265	62	281	75	200	58	181	60	118	41	2,754	60
Valentine, Nebr.....	400	86	345	80	300	80	218	64	140	48	159	57	3,018	66
Vicksburg, Miss.....	311	72	286	69	277	75	212	60	166	53	94	30	2,644	58
Walla Walla, Wash.....	422	89	362	83	301	80	186	55	39	14	46	17	2,554	53
Washington, D. C.....	239	53	236	56	266	71	192	56	184	61	126	43	2,475	55
Wichita, Kans.....	361	80	349	83	283	76	265	76	225	74	187	63	3,175	70
Williston, N. Dak.....	311	64	359	81	233	62	183	54	113	41	141	54	2,852	63
Wilmington, N. C.....	289	66	286	69	251	68	222	63	187	60	168	55	2,929	65
Winnemucca, Nev.....	376	82	393	92	334	89	225	65	206	69	167	58	2,964	65
Wytheville, Va.....	224	50	190	45	209	56	130	37	138	45	121	40	2,106	46
Yakima, Wash.....	404	84	349	79	264	70	171	51	61	22	46	17	2,590	54
Yellowstone Park, Wyo.....	312	66	370	85	262	70	249	73	103	36	96	35	2,700	58
Yuma, Ariz.....	413	95	379	92	346	93	337	96	294	94	258	83	4,094	92

EXCESSIVE RAINFALL, 1937

Table 13 contains statistics of maximum amounts of rainfall during the calendar year 1937. The method of tabulating excessive precipitation has been changed, beginning with the year 1936, to meet the needs of many sewage engineers.

The method heretofore used gave the accumulated depth of precipitation for each 5 minutes for a storm in which the rate of fall equaled or exceeded 0.25 inch in any 5-minute period or 0.30 inch in any 10-minute period, etc., and 0.80 inch in any 1-hour period, or 1.40 inch in 2 hours, the tabulation beginning with the 5-minute period where the rate of 0.05 inch in 5 minutes began and continuing for 5-minute periods up to 120 minutes.

The present method gives the maximum fall of precipitation for the periods 5 to 180 minutes, the maximum amounts being taken for the periods in which the fall is the greatest for the given time, and is tabulated to show the maximum amounts for 5, 10, 20, 30, 45, 60, 80, 100, 120, 150, and 180 minutes, even if the fall does not equal the excessive rate for some of the periods.

Table 13 shows for most stations of the Weather Bureau furnished with self-registering gages the maximum amounts of precipitation in 5, 10, 20, 30, 45, 60, 80, 100, 120, 150, and 180 minutes. The following Table A shows limits at which precipitation is considered as excessive for all stations except in the Southern States, including North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Arkansas, Louisiana, Texas, Oklahoma, and San Juan, P. R.:

TABLE A.—*Showing limits at which precipitation may be considered as excessive:*

Duration (in minutes)	Depth of pre- cipitation (in inches)	Duration (in minutes)	Depth of pre- cipitation (in inches)
5	0.25	35	0.55
10	.30	40	.60
15	.35	45	.65
20	.40	50	.70
25	.45	60	.80
30	.50		

This table is made up from the formula $A=t+20$, where A is the accumulated depth in hundredths of inches and t is the time in minutes.

For the Southern States, Table B is used. This table is made up from the formula $A=2t+30$:

TABLE B.—*Showing limits at which precipitation may be considered as excessive:*

Duration (in minutes)	Depth of pre- cipitation (in inches)	Duration (in minutes)	Depth of pre- cipitation (in inches)
5	0.40	40	1.10
10	.50	45	1.20
15	.60	50	1.30
20	.70	60	1.50
25	.80	80	1.90
30	.90	100	2.30
35	1.00	120	2.70

Similar data for the years 1896 to 1934, inclusive, have been presented in the appropriate annual reports of the Chief of the Weather Bureau and for the years 1935 and 1936 in appropriate issues of the United States Meteorological Yearbook. The published data prior to 1896 consist of a record of maximum amounts of rainfall in 5- and 10-minute periods, also in 1 and 24 hours. The annual report for 1895-96 contains a summary of the records which up to that time had been made at the principal stations supplied with automatic gages.

The excessive precipitation data for the years 1897-1935, inclusive, show the accumulated amounts of precipitation for each 5 minutes during all storms in which the rate of fall equaled or exceeded 0.25 inch in any 5-minute period, or 0.30 inch in any 10-minute period, or 0.35 inch in any 15-minute period, etc.

Normal standard time at the place of occurrence is employed in these tables.

TABLE 13.—Maximum precipitation for stated intervals during 1937 at all stations furnished with self-registering gages

Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)											
	5	10	20	30	45	60	80	100	120	150	180	
NEW ENGLAND STATES												
Portland, Maine:												
June 18.....	0.25	0.31	0.33	0.35	0.36	0.38	0.39	0.43	0.46	0.50	0.58	
July 24.....	.22	.33	.35	.35	.37	.37	.37	.37	.37	.37	.37	
Sept. 13-14.....	.26	.37	.58	.71	.87	1.22	1.58	1.67	1.91	2.34	2.43	
Burlington, Vt.:												
Aug. 19.....	.26	.41	.78	.92	.97	.99	1.04	1.10	1.12	1.12	1.12	
Northfield, Vt.:												
July 17.....	.37	.41	.41	.51	.66	.69	.71	.71	.71	.71	.71	
Aug. 1.....	.34	.47	.62	.65	.65	.65	.68	.69	.69	.69	.71	
Aug. 11.....	.22	.40	.65	.73	.80	.90	.99	1.14	1.22	1.25	1.28	
Aug. 12.....	.25	.37	.42	.44	.49	.50	.51	.51	.51	.51	.51	
Aug. 19.....	.34	.58	.63	.71	.79	.83	.85	.85	.85	.90	.91	
Boston, Mass.:												
Oct. 20.....	.26	.36	.43	.49	.57	.61	.64	.71	.80	.90	1.00	
Dec. 6.....	.15	.21	.29	.45	.59	.81	1.04	1.18	1.47	1.70	1.83	
Nantucket, Mass.:												
Mar. 16.....	.21	.30	.34	.35	.39	.42	.45	.47	.50	.56	.63	
June 14.....	.19	.33	.54	.80	.96	1.19	1.27	1.30	1.30	1.31	1.38	
July 27.....	.26	.37	.44	.48	.53	.58	.61	.61	.62	.63	.63	
Block Island, R. I.:												
July 16.....	.25	.30	.44	.50	.51	.51	.51	.51	.51	.68	.70	
Aug. 12.....	.22	.34	.53	.63	.66	.66	.66	.67	.67	.67	.67	
Aug. 22.....	.23	.35	.41	.41	.41	.41	.41	.41	.44	.45	.45	
Aug. 27.....	.41	.68	1.03	1.24	1.29	1.33	1.35	1.36	1.37	1.62	1.63	
Sept. 4.....	.51	.84	1.00	1.05	1.09	1.29	1.33	1.34	1.35	1.35	1.36	
Providence, R. I.:												
Oct. 23.....	.16	.25	.40	.50	.55	.61	.67	.73	.76	.77	.79	
Hartford, Conn.:												
June 1.....	.38	.58	1.06	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	
June 6.....	.35	.53	1.04	1.22	1.28	1.30	1.36	1.41	1.43	1.44	1.44	
June 14.....	.12	.25	.44	.53	.60	.63	.68	.73	.80	.83	.86	
July 3.....	.34	.36	.42	.45	.54	.60	.62	.62	.62	.62	.62	
July 26.....	.25	.38	.52	.54	.55	.85	.91	.91	.91	.91	.97	
Aug. 8.....	.21	.39	.60	.61	.62	.69	.76	1.00	1.23	1.36	1.36	
Aug. 21.....	.33	.51	.63	.64	.72	.72	.73	.73	.73	.73	.73	
Sept. 4.....	.27	.38	.51	.55	.56	.56	.56	.56	.56	.56	.56	
New Haven, Conn.:												
June 21.....	.26	.45	.78	.84	.92	.97	1.00	1.11	1.22	1.65	1.82	
July 3.....	.17	.26	.43	.48	.63	.75	.97	1.00	1.00	1.00	1.00	
July 15.....	.32	.50	.68	.69	.70	.70	.70	.70	.70	.82	.83	
July 26.....	.18	.32	.49	.58	.58	.58	.72	.77	.87	.97	1.01	
Aug. 10.....	.29	.38	.56	.75	.75	.75	.75	.75	.75	.75	.75	
Aug. 21.....	.41	.78	1.19	1.24	1.31	1.33	1.34	1.34	1.34	1.34	1.34	
Aug. 27.....	.36	.55	.77	.97	1.03	1.30	1.03	1.03	1.03	1.03	1.03	
Oct. 20.....	.26	.32	.41	.53	.73	.84	.89	.95	.99	1.00	1.11	
Nov. 28.....	.19	.29	.45	.59	.80	.95	1.06	1.15	1.25	1.40	1.54	
MIDDLE ATLANTIC STATES												
Albany, N. Y.:												
June 18.....	.23	.42	.49	.49	.50	.50	.51	.51	.52	.52	.52	
June 21.....	.15	.22	.35	.51	.60	.71	.74	.79	.82	.85	.86	
July 26.....	.52	.72	.96	1.53	1.67	1.68	1.68	1.68	1.68	1.68	1.70	
Aug. 10.....	.33	.63	1.07	1.37	1.40	1.41	1.41	1.41	1.41	1.41	1.41	
Sept. 2.....	.35	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	
Sept. 4.....	.36	.47	.73	.97	1.03	1.05	1.07	1.07	1.07	1.07	1.08	
Binghamton, N. Y.:												
May 26.....	.16	.30	.35	.40	.44	.46	.47	.49	.52	.71	.73	
June 6.....	.64	1.06	1.32	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	
July 11.....	.16	.30	.37	.39	.40	.40	.40	.40	.40	.40	.40	
Oct. 23.....	.10	.19	.32	.40	.53	.64	.78	.97	1.14	1.35	1.53	
New York, N. Y.:												
May 13.....	.36	.46	.47	.49	.52	.53	.54	.54	.55	.60	.63	
June 21.....	.26	.34	.36	.39	.51	.59	.61	.62	.62	.64	.71	
July 11.....	.30	.54	.82	.89	.92	.94	.98	1.00	1.01	1.01	1.01	
July 12.....	.23	.35	.47	.59	.74	.74	.74	.74	.74	.74	.74	
Aug. 11.....	.27	.53	.76	.97	1.23	1.42	1.59	1.73	1.91	2.09	2.16	
Aug. 23.....	.14	.24	.40	.55	.76	.84	.90	.97	1.00	1.03	1.06	
Harrisburg, Pa.:												
Feb. 21.....	.20	.33	.49	.58	.67	.72	.79	.84	.87	.99	1.06	
May 5.....	.14	.22	.41	.44	.46	.50	.52	.55	.60	.61	.71	
May 8.....	.34	.49	.55	.60	.71	.79	.84	.90	.92	.93	.96	
June 14.....	.21	.37	.58	.59	.60	.61	.61	.61	.61	.61	.61	
June 18.....	.37	.58	.80	.80	.80	.86	1.50	1.51	1.51	1.51	1.51	
June 21.....	.22	.30	.36	.43	.49	.58	.64	.68	.72	.74	.81	
July 15.....	.18	.32	.42	.43	.45	.46	.46	.46	.47	.49	.50	
July 16.....	.21	.32	.58	.72	.73	.75	.86	.89	.90	.90	.90	
July 26.....	.34	.43	.74	.87	.87	.87	.87	.87	.87	.87	.87	
July 31.....	.18	.31	.42	.44	.45	.45	.45	.45	.45	.45	.45	
Aug. 7.....	.28	.35	.44	.62	.67	.67	.79	.87	.94	.97	1.14	
Aug. 11.....	.32	.37	.41	.41	.41	.41	.41	.41	.41	.41	.51	
Aug. 12.....	.38	.53	.90	1.02	1.06	1.35	1.48	1.49	1.50	1.71	1.71	
Aug. 21.....	.27	.38	.46	.76	.82	.84	.84	.84	.84	1.14	1.14	
Philadelphia, Pa.:												
Apr. 18.....	.25	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	
June 21.....	.29	.38	.55	.70	.75	.99	1.02	1.02	1.02	1.02	1.02	
Aug. 21.....	.23	.39	.56	.71	.74	.81	.83	.88	.94	.95	.95	
Oct. 5.....	.17	.28	.42	.53	.63	.66	.68	.72	.77	.80	.81	
MIDDLE ATLANTIC STATES CON.												
Reading, Pa.:												
Feb. 21-22.....	0.20	0.34	0.42	0.44	0.52	0.56	0.59	0.60	0.61	0.63	0.64	
May 13.....	.21	.32	.38	.38	.39	.39	.39	.41	.54	.55	.55	
May 22.....	.23	.30	.41	.43	.44	.45	.45	.45	.45	.45	.45	
July 5-6.....	.19	.30	.37	.51	.62	.68	.74	.77	.78	.79	.80	
July 26.....	.26	.45	.84	.90	1.02	1.05	1.14	1.14	1.14	1.14	1.16	
Aug. 11.....	.38	.52	.63	.66	.66	1.19	1.26	1.27	1.27	1.27	1.27	
Oct. 23.....	.17	.29	.51	.68	.75	.79	.88	.95	1.02	1.12	1.16	
Scranton, Pa.:												
June 6.....	.25	.40	.62	.93	1.07	1.07	1.07	1.07	1.07	1.07	1.07	
June 21.....	.26	.40	.65	.89	1.09	1.30	1.47	1.62	1.72	1.85	1.87	
Aug. 9.....	.28	.47	.57	.57	.57	.57	.57	.57	.57	.57	.57	
Aug. 11.....	.18	.32	.51	.55	.60	.62	.62	.62	.63	.63	.63	
Aug. 22.....	.20	.33	.49	.60	.74	.86	1.04	1.29	1.47	1.63	1.69	
Atlantic City, N. J.:												
June 19.....	.25	.47	.53	.58	.61	.61	.61	.61	.62	.62	.62	
Aug. 24.....	.19	.31	.42	.53	.69	.83	1.07	1.23	1.37	1.56	1.61	
Aug. 27.....	.36	.53	.70	1.02	1.19	1.20	1.20	1.20	1.20	1.20	1.20	
Aug. 27.....	.35	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	
Oct. 27.....	.14	.20	.30	.50	.61	.63	.66	.68	.75	.92	1.06	
Nov. 28.....	.21	.29	.41	.56	.77	.94	1.07	1.12	1.15	1.24	1.33	
Sandy Hook, N. J.:												
May 14.....	.36	.37	.37	.37	.37	.38	.41	.53	.54	.55	.56	
June 21.....	.24	.37	.54	.60	.66	.70	.72	.80	.87	.89	.98	
Aug. 10.....	.38	.63	.71	.73	.75	.76	.78	.78	.78	.78	.78	

TABLE 13.—Maximum precipitation for stated intervals during 1937 at all stations furnished with self-registering gages—Continued

Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)											Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)										
	5	10	20	30	45	60	80	100	120	150	180		5	10	20	30	45	60	80	100	120	150	180
MIDDLE ATLANTIC STATES—con.																							
Norfolk, Va.—Con.																							
July 14	0.39	0.67	1.16	1.37	1.55	1.60	1.76	1.82	1.86	1.88	1.92												
July 17	.58	.68	.70	.72	.74	.74	.75	.75	.75	.75	.75												
Aug. 13	.40	.71	.96	1.44	1.80	1.91	1.91	1.98	2.11	2.61	2.72												
Aug. 23	.25	.41	.45	.46	.47	.47	.47	.80	.80	.80	.80												
Aug. 24	.26	.32	.34	.40	.41	.42	.42	.42	.42	.42	.42												
Sept. 5	.31	.48	.65	.66	.83	1.09	1.19	1.20	1.21	1.26	1.29												
Nov. 28	.35	.44	.59	.85	1.02	1.13	1.25	1.26	1.26	1.26	1.27												
Richmond, Va.:																							
Jan. 15	.19	.26	.41	.43	.45	.46	.48	.50	.50	.51	.51												
Apr. 6	.22	.31	.42	.50	.53	.57	.63	.68	.75	.83	.83												
June 10	.22	.37	.46	.54	.55	.55	.56	.56	.56	.57	.59												
June 17	.45	.72	1.11	1.24	1.27	1.27	1.27	1.27	1.49	1.54	1.54												
June 18	.17	.30	.41	.44	.45	.47	.54	.59	.63	.66	.68												
June 19	.33	.47	.60	.74	.83	.89	.92	.93	.94	.94	.94												
June 30	.21	.33	.50	.52	.55	.56	.57	.58	.59	.72	.75												
July 13	.37	.52	.60	.63	.65	.65	.67	.69	.70	.71	.71												
July 26	.39	.44	.45	.46	.56	.57	.58	.59	.59	.59	.59												
July 31	.23	.33	.50	.56	.61	.64	.69	.76	.81	.84	.87												
Aug. 8	.39	.67	1.07	1.12	1.18	1.20	1.21	1.22	1.23	1.23	1.23												
Aug. 10	.32	.52	.66	.69	.69	.69	.70	.73	.73	.73	.73												
Aug. 11	.35	.37	.47	.47	.48	.48	.48	.48	.48	.50	.51												
Aug. 22	.44	.70	.99	1.42	1.62	1.64	1.66	1.67	1.68	1.71	2.75												
Aug. 29	.18	.33	.49	.53	.55	.57	.59	.59	.60	.65	.66												
Oct. 22	.13	.25	.38	.48	.63	.71	.92	1.00	1.11	1.48	1.62												
Wytheville, Va.:																							
June 17	.31	.41	.56	.59	.60	.61	.62	.62	.64	.65	.67												
June 27	.21	.34	.51	.63	.65	.65	.69	.69	.70	.70	.70												
Aug. 5	.16	.32	.58	.68	.70	.71	.73	.74	.75	.75	.75												
Aug. 11	.25	.34	.49	.49	.49	.49	.49	.51	.51	.51	.51												
Aug. 13	.37	.50	.62	.62	.62	.62	.62	.62	.62	.62	.62												
Aug. 18	.35	.47	.67	.89	1.05	1.07	1.08	1.08	1.08	1.08	1.08												
Aug. 22	.44	.58	.64	.69	.72	.74	.75	.75	.75	.75	.75												
SOUTH ATLANTIC STATES																							
Asheville, N. C.:																							
July 23	.20	.40	.67	1.00	1.10	1.10	1.10	1.11	1.11	1.11	1.11												
Aug. 5	.44	.72	1.27	1.48	1.56	1.60	1.63	1.64	1.64	1.64	1.64												
Charlotte, N. C.:																							
June 17	.45	.77	.93	.93	1.00	1.09	1.23	1.30	1.31	1.44	1.55												
July 25	.33	.60	.98	1.24	1.42	1.47	1.71	2.22	2.30	2.30	2.30												
Aug. 12	.25	.43	.78	.90	1.33	1.45	1.46	1.46	1.46	1.57	1.62												
Hatteras, N. C.:																							
July 27	.27	.55	.83	.96	1.05	1.15	1.20	1.38	1.67	2.02	2.33												
Aug. 31	.31	.54	.87	1.05	1.06	1.06	1.06	1.07	1.08	1.13	1.13												
Raleigh, N. C.:																							
June 2	.24	.42	.76	.93	1.00	1.01	1.03	1.05	1.05	1.12	1.17												
June 30	.46	.68	.69	.69	.69	.70	.74	.76	.76	.76	.76												
Aug. 14	.31	.58	.81	.84	.84	.84	.84	.84	.84	.84	.84												
Aug. 26	.28	.49	.82	1.00	1.04	1.05	1.11	1.13	1.14	1.18	1.18												
Aug. 29	.48	.80	1.02	1.05	1.09	1.14	1.17	1.19	1.20	1.22	1.23												
Charleston, S. C.:																							
May 19	.27	.51	.70	.77	.79	.82	.83	.83	.85	.85	.85												
June 28	.38	.64	.69	.69	.70	.70	.71	.71	.71	.72	.73												
July 19	.29	.56	.91	1.06	1.10	1.12	1.15	1.16	1.18	1.25	1.27												
July 20	.33	.53	.65	.73	.95	1.01	1.03	1.04	1.06	1.08	1.08												
July 27	.39	.66	.95	1.14	1.45	1.70	1.80	1.82	1.83	1.85	1.87												
Aug. 7	.30	.47	.87	.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Sept. 8	.35	.69	1.04	1.58	2.06	2.20	2.21	2.24	2.25	2.25	2.25												
Columbia, S. C.:																							
May 12	.30	.51	.74	.85	1.00	1.61	1.82	1.82	1.98	2.12	2.12												
June 28	.46	.80	1.20	1.49	1.54	1.54	1.56	1.56	1.56	1.56	1.56												
July 16	.25	.44	.77	.96	1.06	1.06	1.06	1.06	1.06	1.06	1.06												
July 25	.42	.55	.91	1.07	1.09	1.13	1.13	1.24	1.31	1.51	1.58												
Aug. 29	.31	.47	.66	.68	.75	.76	.79	.79	.81	.81	.81												
Augusta, Ga.:																							
June 15	.30	.47	.70	.73	.74	.74	.74	.74	.74	.74	.74												
Savannah, Ga.:																							
May 23	.33	.58	.98	1.19	1.25	1.29	1.29	1.30	1.30	1.30	1.30												
June 28	.29	.51	.75	.84	1.02	1.08	1.58	1.98	2.14	2.21	2.22												
July 29-30	.30	.51	.78	1.06	1.45	1.60	1.93	2.43	2.48	2.54	2.56												
July 31	.33	.47	.81	.94	.98	1.01	1.02	1.09	1.14	1.18	1.18												
Aug. 7	.45	.79	1.24	1.71	1.83	1.86	1.87	1.87	1.87	1.87	1.87												
Aug. 31	.41	.55	.56	.58	.58	.58	.59	.59	.61	.62	.62												
Sept. 12	.42	.77	1.32	1.46	1.55	1.58	1.93	2.06	2.12	2.12	2.13												
Jacksonville, Fla.:																							
June 5	.33	.55	.72	.76	.78	.78	.78	.78	.80	.82	.88												
June 29	.38	.58	.93	1.11	1.24	1.24	1.25	1.25	1.25	1.25	1.25												
July 23 ²	.45	.72	.97	1.10	1.12	1.12	1.12	1.12	1.13	1.16	1.21												
July 24	.45	.72	.97	1.04	1.24	1.33	1.33	1.33	1.34	1.34	1.34												
July 28	.24	.42	.74	.86	.96	1.23	1.36	1.41	1.59	1.97	2.05												
July 31	.33	.45	.74	1.06	1.07	1.07	1.07	1.07	1.07	1.09	1.09												
Aug. 4	.36	.59	1.18	1.56	1.74	1.79	1.99	2.35	2.48	2.52	2.53												
Aug. 9	.35	.57	.72	.78	.79	.79	.79	.79	.79	.79	.79												
Aug. 12	.44	.75	1.3																				

EXCESSIVE RAINFALL, 1937

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TABLE 13.—Maximum precipitation for stated intervals during 1937 at all stations furnished with self-registering gages—Continued

Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)												Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)											
	5	10	20	30	45	60	80	100	120	150	180	5		10	20	30	45	60	80	100	120	150	180		
EAST GULF STATES—continued																									
New Orleans, La.:													OHIO VALLEY AND TENNESSEE—con.												
Mar. 24 ³													Nashville, Tenn.:												
Apr. 3-4													May 12												
May 1													July 17												
June 19													Louisville, Ky.:												
June 28													Jan. 20												
July 9													May 18												
Aug. 7													June 2												
Aug. 11 ³													June 3												
Aug. 14													June 16												
Sept. 6													Aug. 8												
Oct. 2													Aug. 12												
Oct. 17													Evansville, Ind.:												
WEST GULF STATES																									
Shreveport, La.:													Jan. 20												
Mar. 23													Apr. 4												
Sept. 2													May 3												
Nov. 15													May 18												
Fort Smith, Ark.:													June 2												
Sept. 24													June 5												
Little Rock, Ark.:													June 16												
Aug. 21													July 16												
Aug. 27													Aug. 5												
Aug. 31													Aug. 22												
Austin, Tex.:													Sept. 25												
June 4													Indianapolis, Ind.:												
Aug. 16													June 5												
Sept. 3													July 4												
Brownsville, Tex.:													July 12												
May 13													July 13												
May 28													July 14												
Corpus Christi, Tex.:													July 15												
Oct. 17													Aug. 8												
Dec. 29													Aug. 11-12												
Dallas, Tex.:													Sept. 10												
June 16													Sept. 10												
Sept. 6													Terre Haute, Ind.:												
Nov. 9													Feb. 8												
Fort Worth, Tex.:													June 9												
Nov. 9													July 25												
Galveston, Tex.:													Aug. 11-12												
Apr. 3													Cincinnati, Ohio:												
Sept. 2													June 2												
Sept. 11													June 16												
Houston, Tex.:													June 21												
Aug. 19													July 12												
Sept. 25													Aug. 6												
Oct. 16 ³													Aug. 18												
Palestine, Tex.:													Columbus, Ohio:												
Sept. 25													June 5												
Nov. 9													June 25												
Dec. 16													June 26												
Port Arthur, Tex.:													July 10												
Mar. 13-14													July 14												
June 7													Aug. 9												
June 19													Aug. 9												
June 30													Aug. 21												
July 10 ³													Sept. 4												
Oct. 17													Dayton, Ohio:												
San Antonio, Tex.:													Apr. 15												
May 31													Apr. 24												
Oct. 13													June 2												
Oct. 17													June 5												
OHIO VALLEY AND TENNESSEE																									
Chattanooga, Tenn.:																									
Apr. 24																									
June 16																									
Aug. 5																									
Aug. 12-13																									
Aug. 22																									
Aug. 23																									
Aug. 30																									
Knoxville, Tenn.:																									
July 5																									
July 19																									
July 19-20																									
Aug. 12																									
Memphis, Tenn.:																									
May 12																									
July 4																									
Aug. 5 ²																									

TABLE 13.—Maximum precipitation for stated intervals during 1937 at all stations furnished with self-registering gages—Continued

Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)												Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)											
	5	10	20	30	45	60	80	100	120	150	180	5		10	20	30	45	60	80	100	120	150	180		
OHIO VALLEY AND TENNESSEE—CON.																									
Pittsburgh, Pa.:																									
May 26.....	.30	.39	.43	.46	.46	.46	.46	.46	.46	.47	.47		Detroit, Mich.:	0.23	0.30	0.31	0.32	0.34	0.35	0.35	0.35	0.36	0.36	0.36	
July 10.....	.26	.36	.43	.45	.50	.51	.52	.53	.53	.53	.53		May 12.....	.20	.33	.36	.40	.41	.43	.46	.58	.61	.62	.68	
July 14.....	.46	.77	1.05	1.06	1.08	1.10	1.11	1.13	1.14	1.15	1.15		May 21.....	.40	.78	1.35	1.68	2.05	2.23	2.27	2.34	2.39	2.47	2.51	
July 16.....	.43	.69	.95	1.01	1.02	1.02	1.03	1.06	1.11	1.16	1.17		July 9.....	.21	.41	.61	.68	.70	.71	.71	.71	.72	.72	.77	
Aug. 6.....	.32	.35	.39	.39	.39	.39	.39	.39	.39	.39	.39		July 12.....	.20	.41	.61	.68	.70	.71	.71	.71	.72	.72	.77	
Aug. 10.....	.21	.31	.38	.55	.56	.63	.66	.67	.67	.67	.67		July 15.....	.26	.47	.66	.84	1.02	1.12	1.27	1.29	1.32	1.64	1.89	
													Aug. 8.....	.20	.35	.38	.39	.55	.60	.61	.62	.64	.65	.66	
													Aug. 17.....	.27	.39	.52	.56	.57	.58	.58	.58	.58	.58	.58	
LOWER LAKE REGION																									
Buffalo, N. Y.:																									
Apr. 18.....	.29	.34	.34	.35	.36	.38	.38	.39	.40	.42	.43		Alpena, Mich.:												
June 21.....	.15	.28	.42	.53	.60	.75	.97	1.05	1.29	1.42	1.50		June 25.....	.36	.46	.71	.82	1.23	1.28	1.29	1.29	1.29	1.29	1.29	
Canton, N. Y.:													Aug. 11.....	.42	.54	.60	.61	.61	.61	.61	.61	.61	.65	.65	
June 18.....	.14	.27	.44	.54	.64	.72	.74	.74	.74	.75	.83		Aug. 21.....	.21	.32	.44	.64	.68	.70	.73	.99	1.08	1.12	1.16	
June 29.....	.33	.51	.56	.63	.66	.67	.67	.67	.67	.68	.69		Sept. 2.....	.48	.62	.89	1.02	1.07	1.07	1.08	1.10	1.10	1.10	1.10	
Aug. 11.....	.20	.32	.60	.63	.71	.72	.79	.84	.90	.91	.91		Sept. 3.....	.27	.48	.60	.61	.66	.73	.93	1.18	1.42	1.69	1.82	
Aug. 12.....	.44	.50	.52	.53	.54	.55	.55	.55	.62	.66	.67		Escanaba, Mich.:												
Aug. 17.....	.44	.67	.83	.83	.83	.83	.83	.83	.83	.83	.83		Sept. 1.....	.28	.56	1.05	1.41	1.89	2.14	2.21	2.40	2.59	2.61	2.61	
Aug. 19.....	.31	.33	.40	.50	.55	.55	.55	.94	1.04	1.06	1.07		Sept. 1.....	.33	.64	1.00	1.30	1.53	1.69	1.83	1.86	1.86	1.96	2.04	
Ithaca, N. Y.:													Sept. 2.....	.32	.52	.75	.87	.98	.99	.99	.99	1.00	1.00	1.00	
June 18.....	.19	.30	.44	.46	.47	.49	.52	.55	.56	.56	.56		Sept. 9.....	.17	.29	.42	.47	.49	.52	.58	.62	.63	.65	.65	
Aug. 9.....	.20	.31	.35	.39	.41	.41	.42	.42	.43	.43	.44		Grand Rapids, Mich.:												
Aug. 27.....	.17	.31	.48	.74	1.01	1.15	1.33	1.47	1.52	1.98	2.54		June 14.....	.51	.76	.96	.96	1.03	1.23	1.28	1.30	1.30	1.30	1.31	
Oswego, N. Y.:													June 24.....	.20	.39	.69	.91	.96	1.01	1.04	1.05	1.07	1.07	1.07	
Aug. 19.....	.32	.45	.51	.66	.71	.80	1.20	1.27	1.27	1.27	1.27		Aug. 11-12.....	.20	.36	.54	.58	.59	.62	.66	.72	.83	.94	.95	
Rochester, N. Y.:													Aug. 21.....	.12	.20	.38	.51	.65	.69	.74	.74	.74	.75	.75	
June 21.....	.19	.30	.32	.32	.32	.32	.39	.39	.39	.42	.42		Lansing, Mich.:												
July 29.....	.28	.46	.54	.56	.59	.60	.60	.61	.61	.62	.62		June 5.....	.29	.43	.44	.45	.54	.55	.69	.73	.75	.78	.79	
Aug. 11.....	.37	.71	.94	1.32	1.65	1.70	1.77	1.84	1.93	2.11	2.24		June 14.....	.36	.56	.67	.68	.84	.92	.93	.95	.96	.97	.97	
Syracuse, N. Y.:													June 14.....	.21	.40	.44	.44	.49	.49	.49	.49	.49	.49	.49	
June 21.....	.41	.65	.91	1.02	1.19	1.31	1.46	1.53	1.62	1.67	1.69		June 25.....	.37	.67	1.12	1.34	1.47	1.56	1.65	1.72	1.74	1.75	1.77	
July 11.....	.40	.65	.92	1.16	1.33	1.36	1.36	1.36	1.36	1.36	1.36		July 15.....	.22	.36	.39	.39	.41	.41	.41	.41	.41	.41	.41	
July 17.....	.26	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32		Aug. 10.....	.47	.80	1.35	1.37	1.74	1.75	1.75	1.76	1.76	1.76	1.76	
July 24.....	.17	.28	.37	.38	.39	.39	.39	.39	.39	.39	.39		Marquette, Mich.:												
Aug. 7.....	.37	.55	.73	.96	1.15	1.22	1.23	1.23	1.23	1.23	1.23		July 11.....	.43	.71	.87	.96	.96	.96	.96	.96	.96	.96	.97	
Aug. 10.....	.16	.28	.42	.46	.49	.50	.51	.51	.51	.51	.51		Aug. 3.....	.23	.39	.52	.54	.56	.57	.57	.57	.58	.58	.58	
Aug. 11.....	.34	.38	.40	.40	.40	.40	.40	.40	.40	.40	.40		Sault Ste. Marie, Mich.:												
Aug. 12.....	.29	.55	.92	1.30	1.41	1.41	1.42	1.42	1.42	1.42	1.42		July 15.....	.25	.39	.49	.52	.53	.57	.59	.62	.66	.72	.74	
Aug. 19.....	.31	.40	.46	.46	.47	.47	.47	.47	.47	.47	.47		July 25.....	.33	.49	.59	.63	.80	.82	.82	.82	.82	.82	.82	
Erie, Pa.:													Sept. 3.....	.30	.39	.52	.61	.76	.93	1.15	1.16	1.16	1.16	1.17	
May 27.....	.34	.40	.43	.46	.46	.47	.47	.47	.47	.48	.48		Oct. 19.....	.19	.30	.42	.45	.47	.50	.53	.54	.55	.55	.55	
June 17.....	.21	.30	.33	.34	.35	.35	.35	.35	.35	.35	.40		Chicago University, Ill.:												
June 17.....	.32	.47	.78	.87	.93	1.00	1.01	1.08	1.10	1.43	1.83		June 4.....	.21	.33	.37	.41	.42	.42	.42	.42	.42	.42	.42	
July 14.....	.23	.40	.42	.42	.45	.47	.47	.47	.47	.49	.49		June 13.....	.28	.43	.47	.49	.51	.53	.54	.55	.55	.55	.55	
Aug. 6.....	.13	.27	.52	.63	.75	.82	.85	.89	.93	.98	1.01		June 13.....	.41	.57	.62	.62	.63	.63	.63	.63	.63	.63	.63	
Aug. 12.....	.26	.33	.49	.54	.62	.62	.71	.84	.85	.85	.85		June 20-21.....	.34	.64	1.00	1.20	1.34	1.36	1.37	1.38	1.38	1.39	1.41	
Aug. 17.....	.30	.46	.66	.81	.87	.88	.88	.90	.90	.91	.92		Aug. 19.....	.21	.28	.48	.53	.57	.60	.61	.61	.62	.67	.67	
Sept. 4.....	.17	.23	.37	.51	.52	.55	.57	.60	.61	.63	.66		Oct. 4.....	.22	.37	.59	.72	.91	.97	.98	1.00	1.02	1.02	1.03	
Sept. 4.....	.22	.40	.67	.73	.77	.90	.91	1.06	1.06	1.07	1.17		Green Bay, Wis.:												
Cleveland, Ohio:													July 12.....	.17	.26	.44	.49	.52	.52	.53	.53	.58	.63	.64	
May 14.....	.12	.20	.37	.52	.67	.78	.92	.97	1.02	1.05	1.06		July 25.....	.29	.33	.42	.54	.56	.56	.56	.56	.56	.56	.56	
June 21.....	.31	.56	.91	1.20	1.62	1.66	1.67	1.67	1.67	1.67	1.67		Aug. 8.....	.22	.38	.49	.52	.53	.54	.71	.76	.77	.78	.78	
July 15.....	.20	.27	.37	.53	.57	.57	.58	.60	.63	.65	.65		Sept. 10.....	.17	.29	.55	.64	.75	.87	.95	1.02	1.06	1.29	1.47	
July 16.....	.28	.46	.56	.60	.62	.62	.62	.62	.62	.62	.62		Milwaukee, Wis.:												
July 25.....	.26	.30	.32	.43	.48	.48	.48	.48	.62	.63	.63		July 14-15.....	.36	.63	.79	.88	.92	1.03	1.20	1.23	1.25	1.26	1.26	
Aug. 9.....	.28	.43	.52	.52	.53	.53	.53	.55	.56	.56	.93		July 23.....	.36	.48	.69	.71	.72	.72	.72	.72	.72	.72	.72	
Oct. 5.....	.20	.31	.41	.43	.49	.52	.55	.56	.58	.58	.58		July 25.....	.47	.68	.82	.85	.86	.86	.86	.86	.86	.86	.86	
Sandusky, Ohio:													Duluth, Minn.:												
Feb. 8.....	.22	.33	.50	.69	.82	.97	1.01	1.07	1.10	1.13	1.15		May 30.....	.19	.37	.40	.40	.41	.41	.41	.41	.41	.41	.41	
May 22.....	.32	.39	.43	.47	.53	.65	.76	.84	.86	.87	.88		June 23.....	.28	.49	.79	1.08	1.32	1.53	1.62	1.64	1.71	1.76	1.76	
June 25.....	.60	1.20	1.64	2.02	2.21	2.34	3.32	3.48	3.53	3.68	4.03		Aug. 3.....	.16	.24	.41	.53	.69	.76	.8					

TABLE 13.—Maximum precipitation for stated intervals during 1937 at all stations furnished with self-registering gages—Continued

Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)												Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)											
	5	10	20	30	45	60	80	100	120	150	180	5		10	20	30	45	60	80	100	120	150	180		
UPPER MISSISSIPPI VALLEY													MISSOURI VALLEY												
Minneapolis, Minn.:													Columbia, Mo.:												
May 11.....	.23	.39	.43	.47	.55	.59	.65	.69	.73	.74	.74		Apr. 13.....	0.30	0.41	0.42	0.42	0.43	0.52	0.56	0.56	0.56	0.56	0.56	
June 16.....	.38	.57	.83	.85	.86	.86	.86	.86	.87	.87	.87		Apr. 28.....	.28	.41	.59	.65	.68	.71	.72	.72	.72	.72	.72	
Aug. 2.....	.34	.58	1.00	1.11	1.15	1.18	1.21	1.25	1.32	1.40	1.45		Apr. 29.....	.26	.31	.31	.32	.32	.32	.32	.32	.32	.32	.32	
Aug. 3.....	.43	.62	.72	.98	1.20	1.22	1.23	1.23	1.26	1.30	1.33		May 4.....	.26	.36	.40	.41	.42	.42	.42	.42	.42	.42	.42	
La Crosse, Wis.:													June 13.....	.18	.31	.38	.41	.44	.53	.54	.55	.55	.55	.55	
June 19.....	.38	.64	1.07	1.45	1.59	1.66	1.71	1.73	1.76	1.80	1.82		July 17.....	.36	.61	1.01	1.03	1.03	1.03	1.04	1.04	1.12	1.13		
July 21.....	.73	1.02	1.14	1.14	1.15	1.16	1.16	1.16	1.16	1.16	1.16		July 18.....	.28	.40	.47	.48	.48	.59	.62	.62	.62	.62	.63	
Aug. 3.....	.28	.47	.90	1.03	1.25	1.25	1.26	1.26	1.26	1.27	1.27		Aug. 20.....	.43	.54	.87	.92	.93	.93	1.00	1.16	1.22	1.23	1.23	
Aug. 18-19.....	.29	.41	.58	.84	.95	.96	1.00	1.02	1.04	1.05	1.09		Kansas City, Mo.:												
Nov. 8.....	.24	.39	.51	.62	.71	.85	1.02	1.27	1.37	1.60	1.60		May 26.....	.26	.33	.53	.64	.90	1.17	1.17	1.19	1.22	1.35	1.35	
Madison, Wis.:													June 2.....	.32	.53	.78	.87	.92	.93	.93	.93	.94	.94	.94	
July 12.....	.41	.71	.89	1.04	1.12	1.21	1.22	1.23	1.23	1.23	1.23		June 16.....	.31	.36	.36	.36	.36	.36	.36	.37	.37	.37	.37	
Sept. 1.....	.6	0.80	1.36	1.70	1.95	1.96	2.17	2.22	2.23	2.23	2.24		July 18.....	.39	.64	.80	.87	.89	.94	.97	.97	.97	.98	.98	
Charles City, Iowa:													Aug. 10.....	.19	.30	.42	.49	.51	.56	.56	.57	.57	.58	.58	
May 26.....	.23	.41	.66	.85	1.31	1.44	1.94	2.09	2.15	2.19	2.20		Aug. 19.....	.15	.24	.33	.51	.67	.87	.92	.97	1.04	1.14	1.20	
June 12.....	.19	.28	.39	.53	.76	1.04	1.21	1.31	1.39	1.40	1.45		St. Joseph, Mo.:												
July 14.....	.17	.30	.45	.51	.52	.52	.52	.52	.52	.52	.52		July 13.....	.18	.33	.55	.72	.87	.90	1.07	1.14	1.33	1.39	1.55	
Aug. 11.....	.36	.59	.81	.88	.92	.94	.95	.98	.99	1.01	1.01		July 16.....	.20	.35	.58	.62	.66	.67	.69	.75	.80	.85	.86	
Davenport, Iowa:													July 18.....	.18	.35	.67	.78	.91	1.03	1.12	1.21	1.24	1.26	1.26	
May 8.....	.25	.28	.30	.30	.30	.30	.30	.30	.30	.30	.30		July 29.....	.56	.80	1.32	1.55	1.65	1.72	1.75	1.75	1.75	1.78	1.79	
May 18.....	.25	.30	.38	.41	.43	.43	.43	.43	.44	.44	.44		Aug. 19.....	.35	.60	.89	1.04	1.10	1.11	1.13	1.15	1.16	1.18	1.20	
June 13.....	.23	.32	.35	.37	.39	.43	.44	.44	.44	.45	.45		Springfield, Mo.:												
July 3.....	.23	.31	.39	.41	.42	.43	.44	.45	.45	.46	.46		Apr. 28.....	.28	.33	.39	.40	.41	.41	.41	.41	.42	.42	.42	
July 13-14.....	.24	.42	.79	1.12	1.33	1.55	1.74	1.82	1.91	1.95	1.95		Apr. 29.....	.28	.54	.70	.77	.83	.83	.84	.84	.84	.84	.84	
July 15.....	.47	.75	1.11	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15		May 21.....	.27	.41	.56	.64	.67	.79	.84	.86	.87	.88	.88	
Aug. 19.....	.26	.29	.29	.36	.37	.37	.39	.40	.40	.40	.40		May 21-22.....	.12	.21	.41	.52	.56	.59	.61	.65	.68	.73	.74	
Sept. 10.....	.26	.31	.33	.36	.46	.50	.58	.61	.64	.65	.65		June 3.....	.26	.47	.56	.56	.57	.57	.57	.57	.57	.57	.57	
Sept. 23.....	.10	.18	.32	.37	.38	.38	.38	.38	.38	.38	.38		June 4.....	.30	.58	.72	.72	.93	1.05	1.45	1.63	1.64	1.65	1.67	
Des Moines, Iowa:													June 9.....	.50	.63	.77	.81	.85	.90	1.00	1.08	1.15	1.28	1.32	
May 11.....	.28	.34	.49	.51	.55	.55	.87	.90	.90	.90	.90		June 14.....	.22	.37	.70	1.06	1.32	1.53	1.87	2.05	2.31	2.35	2.73	
May 19.....	.31	.61	.92	.96	.98	.98	.98	.98	.98	.98	.98		July 18.....	.18	.32	.45	.49	.50	.52	.57	.62	.68	.80	.93	
May 20.....	.48	.69	.73	.78	.86	.87	.89	1.09	1.42	1.55	1.58		July 19.....	.31	.56	.72	.73	.76	.77	.78	.80	.81	.82	.82	
May 25.....	.23	.44	.83	1.04	1.18	1.21	1.23	1.23	1.23	1.53	1.59		Aug. 4.....	.18	.33	.57	.72	.81	.84	.85	.87	.90	.91	.91	
June 13.....	.26	.37	.50	.57	.60	.64	.71	.78	.88	.93	.95		Sept. 4-5.....	.31	.51	1.01	1.32	1.50	1.54	1.59	1.68	1.74	1.78	1.80	
June 18-19.....	.16	.25	.36	.50	.71	.79	.80	.81	.82	.84	1.18		Topeka, Kans.:												
Dubuque, Iowa:													Apr. 23.....	.23	.40	.57	.59	.60	.60	.60	.60	.60	.60	.60	
Apr. 24.....	.23	.32	.40	.46	.47	.48	.48	.48	.48	.48	.48		May 8.....	.21	.36	.46	.50	.59	.63	.63	.63	.63	.63	.63	
May 29.....	.24	.45	.48	.50	.50	.52	.52	.52	.52	.52	.52		May 26.....	.43	.51	.52	.52	.52	.52	.52	.52	.52	.52	.52	
June 13.....	.25	.45	.61	.68	.74	.80	.83	.87	.94	1.02	1.16		July 23.....	.20	.30	.36	.36	.48	.49	.72	.86	.98	.99	.99	
June 15.....	.21	.37	.53	.58	.62	.63	.65	.66	.66	.66	.66		Aug. 17.....	.20	.32	.51	.52	.52	.52	.57	.58	.61	.63	.73	
June 20.....	.34	.61	.89	1.22	1.46	1.64	1.83	1.89	1.94	1.96	1.97		Aug. 19.....	.21	.29	.47	.69	.97	1.13	1.38	1.52	1.59	1.61	1.67	
July 12.....	.25	.34	.36	.36	.36	.36	.36	.36	.36	.36	.45		Lincoln, Nebr.:												
Keokuk, Iowa:													May 25-26.....	.19	.22	.40	.41	.44	.45	.45	.48	.49	.49	.49	
May 25.....	.33	.49	.78	.89	.98	1.01	1.01	1.01	1.01	1.01	1.01		June 12-13.....	.31	.48	.71	.80	1.00	1.08	1.10	1.11	1.16	1.21	1.25	
July 8.....	.39	.70	1.11	1.53	1.94	1.98	2.00	2.00	2.01	2.01	2.02		July 12.....	.19	.32	.50	.58	.79	.98	1.04	1.05	1.06	1.06	1.06	
July 12.....	.29	.39	.44	.50	.52	.53	.54	.54	.54	.59	.69		Omaha, Nebr.:												
Aug. 3.....	.31	.54	.83	1.08	1.34	1.34	1.34	1.48	1.55	1.56	1.56		May 26.....	.25	.40	.50	.52	.54	.56	.57	.57	.57	.57	.57	
Aug. 18.....	.34	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39		May 30.....	.20	.31	.39	.40	.41	.43	.49	.62	.67	.72	.79	
Nov. 1.....	.29	.47	.64	.74	.79	.80	.80	.80	.80	.92	.97		June 12.....	.22	.34	.44	.51	.68	.95	1.11	1.23	1.28	1.31	1.34	
Cairo, Ill.:													June 15.....	.25	.45	.70	.93	.99	1.09	1.57	1.74	1.79	1.80	1.80	
Jan. 6.....	.16	.26	.40	.46	.53	.63	.71	.79	.85	.89	.93		July 13.....	.40	.66	.89	.95	.98	.99	1.02	1.05	1.07	1.07	1.07	
Jan. 20.....	.25	.32	.46	.55	.62	.68	.81	.85	.89	.92	.97		July 18.....	.41	.72	1.30	1.56	1.67	1.68	1.78	1.79	1.85	1.87	1.92	
Apr. 30.....	.26	.43	.62	.72	.76	.76	.77	.77	.77	.77	.77		July 29.....	.32	.55	.74	.92	1.07	1.09	1.10	1.12	1.12	1.12	1.12	
May 18.....	.19	.32	.46	.59	.76	1.07	1.19	1.21	1.21	1.21	1.21		Valentine, Nebr.:												
June 3.....	.16	.27	.37	.43	.70	.76	.78	.83	.84	.90	.92		July 20.....	.20	.32	.36	.38	.40	.42	.43	.44	.44	.44	.44	
Sept. 2.....	.21	.33	.38	.38	.38	.38	.38	.38	.38	.38	.38		Aug. 1.....	.39	.62	.76	.78	.79	.79	.79	.79	.79	.79	.79	
Sept. 3.....	.40	.46	.47	.47	.48	.48	.49	.49	.49	.49	.49		Sioux City, Iowa:												
Sept. 10.....	.26	.49	.59	.60	.61	.61	.61	.63	.63	.63	.														

TABLE 13.—Maximum precipitation for stated intervals during 1937 at all stations furnished with self-registering gages—Continued

Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)												Stations and dates	Maximum amounts of precipitation (in inches) (5 to 180 minutes)											
	5	10	20	30	45	60	80	100	120	150	180	5		10	20	30	45	60	80	100	120	150	180		
NORTHERN SLOPE—continued													SOUTHERN PLATEAU												
Cheyenne, Wyo.:													Albuquerque, N. Mex.:												
July 15.....	0.24	0.27	0.41	0.52	0.52	0.52	0.53	0.53	0.53	0.53	0.54	May 28.....	0.25	0.32	0.36	0.38	0.40	0.44	0.48	0.55	0.55	0.56	0.56		
Aug. 12.....	.34	.38	.46	.51	.52	.52	.52	.52	.52	.52	.52	June 23.....	.19	.31	.38	.41	.44	.45	.46	.46	.46	.46	.46		
Lander, Wyo.:												June 26.....	.22	.38	.51	.53	.55	.56	.56	.56	.56	.62	.75		
July 6.....	.19	.32	.37	.38	.40	.41	.42	.43	.44	.44	.44	Santa Fe, N. Mex.:													
North Platte, Nebr.:												Sept. 27.....	.40	.56	.63	.67	.68	.71	.73	.80	.80	.83	.83		
June 25-26.....	.17	.31	.40	.48	.54	.57	.64	.75	.83	.95	1.01	Sept. 8.....	.16	.25	.41	.44	.54	.58	.59	.59	.59	.59	.59		
July 16.....	.52	.97	1.26	1.26	1.26	1.27	1.27	1.27	1.27	1.27	1.27	Phoenix, Ariz.:													
MIDDLE SLOPE													Sept. 21.....	.25	.34	.37	.48	.58	.60	.61	.62	.62	.63	.63	.63
Pueblo, Colo.:													MIDDLE PLATEAU												
July 19.....	.42	.47	.48	.48	.48	.48	.48	.48	.48	.48	.48	Winnemucca, Nev.:													
Aug. 29.....	.28	.39	.43	.44	.48	.57	.62	.80	.82	.83	.83	May 24.....	.21	.29	.41	.44	.48	.48	.48	.48	.48	.48	.48		
Concordia, Kans.:												Salt Lake City, Utah:													
Mar. 23.....	.21	.33	.43	.46	.47	.49	.50	.52	.54	.58	.65		July 6.....	.21	.30	.34	.40	.45	.48	.50	.51	.52	.52	.52	
May 26.....	.24	.30	.38	.39	.48	.51	.52	.52	.52	.52	.52		MIDDLE PACIFIC COAST REGION												
June 4.....	.28	.40	.54	.64	.67	.70	.73	.80	.84	.85	.86		Eureka, Calif.:												
July 16.....	.18	.29	.54	.62	.64	.67	.67	.67	.67	.67	.67	Dec. 11.....	.21	.30	.31	.31	.32	.32	.32	.32	.32	.32	.32		
July 25.....	.45	.71	.83	.90	.91	.92	.92	.92	.92	.92	.92	Redding, Calif.:													
Aug. 26.....	.18	.36	.60	.77	.83	.85	.86	.86	.86	.86	.86	Dec. 10.....	.15	.21	.38	.52	.72	.84	.96	.99	1.02	1.22	1.36		
Dodge City, Kans.:												SOUTH PACIFIC COAST REGION													
June 8.....	.43	.79	1.31	1.48	1.59	1.61	1.62	1.62	1.62	1.62	1.62	Fresno, Calif.:													
July 19.....	.22	.32	.36	.37	.40	.41	.42	.42	.42	.42	.42	Dec. 11.....	.15	.29	.40	.46	.51	.56	.58	.58	.58	.58	.58		
July 19.....	.46	.65	1.02	1.19	1.26	1.26	1.27	1.29	1.29	1.29	1.29	San Diego, Calif.:													
Wichita, Kans.:												Feb. 6.....	.13	.22	.38	.50	.67	.86	.99	1.08	1.13	1.22	1.28		
Apr. 20.....	.24	.32	.35	.36	.36	.36	.36	.36	.36	.36	.36	ISLAND POSSESSIONS													
May 21.....	.34	.51	.60	.62	.63	.64	.65	.65	.65	.65	.65	San Juan, P. R.:													
May 24.....	.20	.34	.56	.60	.62	.62	.64	.65	.65	.65	.65	Jan. 4.....	.28	.49	.74	.78	.82	.88	.88	.88	.88	1.13	1.60		
June 8-9.....	.50	.60	.64	.84	1.02	1.12	1.21	1.28	1.36	1.65	1.88	Oct. 4.....	.24	.47	.83	.96	.97	.98	.98	.98	.98	1.04	1.05		
July 17.....	.28	.52	.72	.76	.79	.83	.88	.94	.98	.98	.98	Nov. 29.....	.30	.52	.76	.86	1.26	1.44	1.53	1.66	1.99	2.11	2.30		
July 17-18.....	.38	.57	.83	.96	.97	.97	.97	.97	.98	.99	1.43	Jan. 24.....	.30	.40	.74	.85	.88	.88	.88	.88	.88	.88	.88		
July 19.....	.18	.24	.45	.48	.48	.49	.51	.52	.52	.52	.52	Feb. 2.....	.32	.56	.77	.79	.82	.83	.83	.83	.83	.83	.83		
Sept. 8.....	.24	.33	.41	.45	.46	.47	.59	.63	.63	.63	.65	Feb. 5.....	.29	.39	.59	.66	.80	.85	.92	.96	1.05	1.11	1.23		
Oklahoma City, Okla.:												Feb. 6.....	.18	.32	.53	.68	.86	1.00	1.05	1.25	1.36	1.50	1.64		
Aug. 20.....	.48	.78	1.04	1.05	1.05	1.05	1.07	1.08	1.09	1.10	1.15	Sept. 26.....	.34	.50	.85	.96	1.09	1.11	1.12	1.12	1.12	1.12	1.12		
Sept. 4.....	.44	.76	1.10	1.28	1.35	1.39	1.41	1.41	1.41	1.41	1.46	Dec. 26.....	.31	.50	.69	.83	.84	.89	.96	1.06	1.07	1.15	1.23		
SOUTHERN SLOPE																									
Abilene, Tex.:																									
June 28.....	.41	.60	.73	.92	1.05	1.06	1.06	1.06	1.06	1.10	1.19														
Aug. 21.....	.27	.51	.76	1.02	1.32	1.45	1.50	1.52	1.53	1.53	1.53														
Amarillo, Tex.:																									
June 7.....	.41	.57	.59	.59	.59	.59	.59	.59	.59	.59	.59														
Roswell, N. Mex.:																									
April 19.....	.34	.60	.88	.99	1.06	1.18	1.21	1.23	1.23	1.23	1.23														
May 23.....	.33	.40	.42	.59	.63	.64	.68	.70	.71	.73	.77														
June 3.....	.16	.28	.46	.58	.64	.74	.76	.86	.86	.86	.86														
Sept. 8.....	.22	.33	.48	.59	.68	.70	.70	.71	.71	.72	.73														
Sept. 10.....	.20	.31	.43	.44	.63	.81	.83	.96	.98	1.14	1.55														

¹ Amounts for periods 120-150-180 estimated.² Amounts estimated.³ Partly estimated, due to faulty tipping-bucket record.⁴ Amounts for periods 5-60, inclusive, inaccurate, due to faulty record.

NOTE.—The following stations had no excessive precipitation during the year 1937: New England, Eastport, Maine; South Atlantic States, Greensboro and Wilmington in North Carolina; northern slope, Missoula, Mont., and Sheridan and Yellowstone Park in Wyoming; middle slope, Denver, Colo.; southern slope, Del Rio, Tex.; southern plateau, El Paso, Tex., and Yuma, Ariz; middle plateau, Reno, Nev., Modena, Utah, and Grand Junction, Colo.; northern plateau, Baker, Oreg., Boise and Pocatello, Idaho, and Spokane, Walla Walla, and Yakima in Washington; north Pacific coast region, North Head, Seattle, and Tatoosh Island in Washington; Portland and Roseburg in Oregon; middle Pacific coast region, Sacramento and San Francisco in California; south Pacific coast region, Los Angeles, Calif.; and in Alaska, Fairbanks, Juneau, and Nome.

Excessive precipitation data for the years 1931 and 1932 and for 1933 and 1934 appear, respectively, in the 1933-34 and 1934-35 issues of the Report of the Chief of the Weather Bureau.

MONTHLY AND ANNUAL EVAPORATION, 1937

The monthly and annual amounts of evaporation during the year 1937 appear in Table 14 below. The number of these reports at the present time is small, records appearing from less than half of the States.

The evaporation measurements are all made from cylindrical pans, 4 feet in diameter, 10 inches deep, placed on framework laid on the ground, and exposed as far as possible to full sunshine. A description of equipment and methods of observation appeared in the Monthly Weather Review of December 1916, pages 674 to 677.

TABLE 14.—*Monthly and annual evaporation, in inches, at class A stations for 1937*

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
ALABAMA													
Fairhope ¹	2.11	2.55	3.40	5.22	6.65	5.65	6.88	4.86	4.75	3.23	2.22	1.57	49.09
ALASKA													
Fairbanks						6.11	5.09	2.12	1.63				
Matanuska						3.54	4.08		1.96	.78			
ARIZONA													
Lee's Ferry	.74	1.80	4.91	8.62	11.47	12.22	12.43						
Mesa	2.38		5.26	8.42	9.37	11.34	11.96	10.67	8.13	5.98	3.26	2.77	
Roosevelt	1.82	1.85	3.54	5.66	8.86	10.28	9.87	8.06	5.83	3.65	2.37	1.26	63.05
University of Arizona (Tucson)	1.98	4.13	6.34	8.80	10.26	10.61	11.88	10.82	8.51	6.49	3.91	2.40	86.13
Yuma (citrus)	3.15	5.30	7.72	11.10	13.24	14.30	15.91	15.06	12.31	8.63	5.28	4.12	116.12
Yuma (valley)	3.40	5.52	7.78	11.40	12.68	14.21	14.93	12.50	10.25	7.27	4.69	4.16	108.79
ARKANSAS													
Hope ²		2.70	4.22	5.30	.715	7.82	8.22	7.83	6.79	4.81	3.02	1.61	
Russellville ³	1.09	2.73	3.73	6.07	7.30	8.27	9.06	8.46	5.36	3.97	2.28	1.11	59.43
Stuttgart ⁴		2.52	3.32	5.83	6.28	6.35	6.81	6.82	4.26	2.79	1.48	.47	
CALIFORNIA													
Alvarado (near)	1.24	1.99	3.09	4.75	6.93	7.21	7.74	6.89	5.50	3.35	2.22	1.48	52.39
Chula Vista	2.88	2.88	4.94	5.60	5.98	7.17	7.22	7.18	6.24	4.55	2.79	2.78	60.21
Davis		2.07	3.22	6.67	9.07	8.85	10.50	9.85	7.55	4.62	1.80	.99	
Fall River Mills		.92	2.26	5.11	8.74	8.80	12.31	10.88	7.34	2.84	1.35	.67	
Lodi	1.03	1.68	2.93	5.64			12.50	11.82	8.31	4.74	1.86	.77	
Mojave (Backus Ranch)		3.87	5.37	9.30	14.86	17.17	20.70	21.06	14.69	8.42	5.23	3.95	
Oakdale	1.04	1.93	2.62	4.85	8.79	10.96	13.96	11.87	8.54	4.31	2.44	.94	72.25
Tahoe					4.03	3.88	4.53	4.93	3.55	1.67			
GEORGIA													
Experiment				5.63	6.74	8.22	8.30	5.94	4.59	3.38			
Tifton ⁵					8.46	7.35	7.33	6.55	4.88	4.03	2.85	2.19	
HAWAII													
Honolulu (Upper)	3.28	3.48	4.34	6.32	6.15	6.10	7.06	6.15	7.00	5.42	4.64	3.65	63.59
Pahala	3.88	3.78	3.71	5.70	5.12	6.27	6.27	6.34	4.95	4.87	5.50	3.74	60.13
IDAHO													
Aberdeen				4.67	8.18	7.18	8.97	8.72	5.70	3.31			
Arrowrock				4.09	8.64	8.10	12.42	11.17	7.10				
Lifton					6.37	6.34	7.37	7.87	5.03	2.68			
Milner Dam				4.75	7.58	7.50	9.09	9.27	6.41	3.52	1.53		
INDIANA													
Indianapolis ⁶						5.80	6.56	6.23	4.26				
IOWA													
Ames				3.40	5.83	7.77	9.19	8.59	7.53	3.29			
Cherokee ⁷								7.88	6.40	3.08			
Iowa City ⁸						7.12	7.70	6.53	5.84	2.95			
KANSAS													
Hays ⁹				7.67	10.07	13.99	16.00	17.41	11.52	7.20			
Tribune						10.30	13.97	13.87	8.14				
KENTUCKY													
Eadsville (Lock 21, Cumberland River) ¹⁰					5.26	5.86	6.26	5.25	3.57	2.24	1.26		
MINNESOTA													
Duluth ¹¹			2.52	2.46	4.39	5.68	5.79	6.24	3.53	3.02	4.36	4.63	
MISSOURI													
Lakeside			2.59	4.98	5.90	7.42	8.28	8.20	6.41	4.29	2.42		

¹ Observations taken at Silverhill prior to April 1934.² Station opened October 1936.³ Station opened Sept. 9, 1936.⁴ Became class A station 1937.⁵ Station opened Apr. 9, 1937.⁶ Station opened Apr. 30, 1937.⁷ Station opened July 14, 1937.⁸ Station opened May 25, 1937.⁹ Station opened June 1, 1937.¹⁰ Station opened Jan. 15, 1937.¹¹ Station opened Jan. 1, 1937.

TABLE 14.—*Monthly and annual evaporation, in inches, at class A stations for 1937—Continued*

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
MONTANA													
Agriculture College (Bozeman)				3.18	7.86	5.73	8.45	8.84	5.15	3.13			
Malta					9.86	8.75	10.04	9.00	5.39	2.72			
Sherburne Lake							9.53	9.07	5.00	4.37			
Valier					9.77	6.60	7.52	8.27	5.62				
NEBRASKA													
Bridgeport					7.19	7.00	9.74	9.82	5.85	3.70			
Lincoln				5.73	6.77	9.28	11.89	12.59	8.48	5.18			
NEVADA													
Boulder City		4.30	6.84	11.98	17.36	18.22	17.73	18.43	13.40	9.83	5.47	4.33	
Lamoille					7.22	6.99	9.34	11.20	8.32	4.68			
NEW MEXICO													
Agriculture College	3.40	4.48	6.49	10.85	11.31	13.17	12.98	11.02	7.55	6.53	4.38	2.64	94.80
Conchas Dam	2.77	6.01	7.26	12.00	12.16	13.73	13.94	15.23	10.38	7.80	5.14	2.90	109.32
Elephant Butte Dam	4.38	4.74	7.82	14.02	15.50	16.77	15.77	14.04	9.86	7.56	5.78	3.00	119.24
El Vado Dam							8.98	9.03	7.04	4.66			
Navajo Experiment Station				10.42	12.43	11.45	11.06	12.68	7.54	5.96	4.49		
Portales ¹²	3.37	3.55	5.78	7.09	9.86	10.30	11.37	11.59	7.35	5.21	3.36	1.98	80.81
Therma					7.35	8.86	7.47	6.26	5.80	4.90			
NEW YORK													
Albany					5.00	5.53	6.30	4.70	3.38	2.02			
Buffalo ¹³	3.85	3.45	3.59	2.61	4.01	4.56	6.62	4.96	6.02	5.14	3.48	1.86	50.15
Ithaca					4.43	4.92	6.10	5.54	3.66	2.14			
NORTH CAROLINA													
Chapel Hill	1.00	1.51	3.05	3.84	5.67	6.30	5.78	4.73	3.70	2.24	1.73	1.10	40.65
OHIO													
Dayton ¹⁴				3.62	4.65	5.53	6.13	5.67	4.00	2.20			
Ohio State University				2.51	3.72	4.06	4.43	4.17	3.08	1.63			
Wooster				3.41	4.20	4.52	5.26	4.03	3.74				
OKLAHOMA													
University of Oklahoma ¹⁵					8.52	8.71	11.30	9.87	6.74	5.42	2.54		
OREGON													
Corvallis				2.02	4.45	4.26	6.20	5.74	3.53				
Medford ¹⁶									4.96	2.08		.86	
Warm Spring Reservoir				4.89	9.00	8.74	13.10	10.94	7.12				
PENNSYLVANIA													
Wallenpaupack Dam					5.84	6.46	6.90	5.67	4.07				
PUERTO RICO													
San Juan	5.91	5.43	8.00	8.62	8.14	9.02	9.15	7.69	7.82	7.54	5.40	6.59	89.31
TENNESSEE													
Lock A, Neptune ¹⁷		1.80	2.58	4.51	5.52	6.61	7.23	6.58	4.48	2.87	1.89		
TEXAS													
Austin	1.06	3.13	3.41	5.97	7.98	7.07	9.33	9.56	6.87	5.41	2.99		
Dilley	1.68	3.64	4.31	7.89	9.45	10.38	9.93	11.63	7.80	6.62	3.93	1.55	78.81
UTAH													
Bear River Game Refuge ¹⁸								12.38	8.90	4.21	1.41		
Myton						7.11	6.15	5.88	4.77	3.26			
Piute Dam					9.89	10.86	9.90	9.67	7.41	4.98			
Utah Lake			2.99	5.61	10.61	10.48	9.36	10.21	7.39	4.03	1.95		
WASHINGTON													
Kachess Lake					4.52	4.52	7.12	4.60	3.37	2.01			
Walla Walla			1.72	3.04	8.13	7.38	12.12	11.42	6.63	2.26			
Wind River					5.30	4.75	6.93	5.83	3.29	1.49			
VIRGIN ISLANDS													
St. Croix	5.54	5.44	6.23	6.55	6.55	6.26	7.10	6.58	6.36	4.78	4.82	4.03	70.24
WEST VIRGINIA													
Clarksburg				3.62	5.31	5.49	5.70	4.52	3.04	1.35			
WISCONSIN													
Kewaunee ¹⁹		4.63	5.86	4.17	5.28	1.55	1.72		1.85	2.54	3.65	3.30	

¹² Observations taken at Santa Fe prior to March 1934.¹³ Station opened Jan. 2, 1937.¹⁴ Station opened Oct. 12, 1936.¹⁵ Station opened Apr. 19, 1937.¹⁶ Station opened Sept. 1, 1937.¹⁷ Station opened Sept. 17, 1936.¹⁸ Station opened Aug. 4, 1937.¹⁹ Station opened Jan. 12, 1937.

ANNUAL METEOROLOGICAL SUMMARIES, 1937

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MONTHLY AND ANNUAL METEOROLOGICAL SUMMARIES FOR 184 STATIONS FOR 1937

EXPLANATION OF THE TABLES

For a detailed account of the method of reducing the observed barometric pressures the reader is referred to the report on the barometry of the United States, Canada, and the West Indies, to be found in the Annual Report of the Chief of the Weather Bureau, 1900-1901, volume II.

Pressure.—Two mercurial barometers of the well-known Fortin cistern pattern, or a modified form thereof, are furnished each station. One of these, the station barometer, is used in making all regular observations; the other, the extra, is held in reserve for use in case of emergency, except that monthly comparative readings are made on the two instruments for purpose of check upon the deterioration of either instrument.

Each barometer, before issue to station, is compared with the substandard at Washington, and a certificate-of-correction card furnished showing the several constant corrections that must be applied to the readings of the instrument in order to derive therefrom the actual pressure of the air in standard units at a specified elevation. Each observation as made, therefore, is corrected by the application of the following:

- (1) Correction of scale error, capillarity, etc.
- (2) Correction to standard gravity, comprising both latitude and altitude terms.
- (3) Correction for removal—a correction applied if any change has been made in the elevation of the barometer, to reduce the readings to the elevation adopted in 1900. (However, at a very few stations the elevation of 1900, or the original elevation of a station opened since 1900, has been replaced as the "station elevation" by an actual elevation since established.)

Corrections 1, 2, and 3 are constant for any one station and are combined in a single sum.

- (4) Correction for the temperature of the scale and mercurial column.

In the pressure columns of this part the values presented are those at the station elevations of the barometer cisterns, which are at various heights above the ground level, but usually less than 100 feet. On the other hand, daily weather maps and most other pressure data issued by the Bureau indicate sea-level pressures.

The monthly mean pressures given in the summary are deducted from the corrected observations of pressure at 7:30 a. m. and 7:30 p. m., seventy-fifth meridian time, by taking the mean thereof and applying thereto a correction to reduce to the mean of 24-hourly observations. At several Alaska stations and at Honolulu the mean is printed uncorrected. The extremes are determined, wherever possible, from the barograph trace.

Temperature.—The temperature of the air at 7:30 a. m. and 7:30 p. m., seventy-fifth meridian time, and at noon, local time, is obtained by the use of the whirled dry-bulb thermometer. The latter is a part of the whirled psychrometer and is mounted in the thermometer shelter adopted in 1885. The means of these observations are given in the columns headed 7:30 a. m., 7:30 p. m., and noon, respectively.

The maximum temperature is obtained by the use of the Negretti and Zambra mercurial thermometer, having a constriction in the bore of the tube below the scale. The minimum temperature is obtained by the use of the ordinary Rutherford alcohol minimum thermometer. Both instruments are read and the values recorded twice daily, at 7:30 a. m., and 7:30 p. m., seventy-fifth meridian time, and are set twice daily at 7:30 a. m. and 7:30 p. m. The extremes given in the summaries are for the civil day, midnight to midnight, normal standard time. The monthly means have been obtained by dividing the sum of the mean maximum and mean minimum temperatures by 2.

Moisture.—The monthly means of the dew point, relative humidity, and vapor pressure are given as computed directly from the original daily observations.

The rain gages used at the regular Weather Bureau stations have a circular catchment area of about 8 inches diameter, and the snow, hail, or sleet caught within them is melted and measured as water. The rain gage proper is set within an enclosing cylinder, which serves as an overflow attachment in the case of heavy rains and as a snow gage in the winter season.

The sum total of the depth of rain and melted snow is measured to within 0.01 inch at 7:30 a. m. and 7:30 p. m., seventy-fifth meridian time, daily. The total precipitation is determined from the amounts recorded daily, midnight to midnight, standard of time in local use.

The snow caught and retained in the gage is melted and measured as water. No correction is applied for snow that is lost out of the gage by the eddying action of the wind; consequently in some cases the record is less than would be given if the observer had measured cylinders of snow cut from the spots representing the average snowfall on the ground. When it is known that the catch of the snow gage is markedly at fault, an independent ground measurement is made and used as the official record. The loss of both rain and snow caused

by high winds, from gages exposed on the roofs of tall buildings in which some of the regular stations of the Weather Bureau are located is undoubtedly larger than is the case at the cooperative stations where the gages are located in the open country and near the ground, but this loss does not appear to be sufficient to make the monthly sums derived from these two classes of stations wholly inconsistent with each other.

By the maximum precipitation in 24 hours is meant the greatest measurement for any 24 consecutive hours; it does not refer to the rate of rainfall for 24 hours, as deduced from short, heavy showers.

The number of days with precipitation amounting to 0.01 and 0.04 inch, respectively, relates to the rainfall from midnight to midnight, standard of time in local use. No record is made of deposits of dew.

The total snowfall column presents the depth as unmelted snow. The month in this instance runs from the last observation of the preceding month to the last observation of the month itself.

The cloudiness recorded in the summaries is derived from personal observations. The proportion of sky covered by clouds is estimated by the observer at 7:30 a. m., 7:30 p. m., and noon, on a scale of 0-10. These observations cannot be combined into a daily mean in the present state of our knowledge of the diurnal variations in cloudiness, and are therefore given separately. In order, however, to obtain a general record of the sunshine as affecting the growth of plants, the observer keeps some memoranda of the cloudiness sufficient to enable him at the end of the day to determine the average cloudiness on the scale given above from sunrise to sunset; the resulting average for each month is given in the column of "daylight" cloudiness.

The number of days that were clear, as given under "Number of days, etc.", includes those on which the daylight cloudiness was 0-, 1-, 2-, or 3-tenths; the days partly cloudy were those on which the daylight cloudiness was 4-, 5-, 6-, or 7-tenths; the cloudy days were those having 8-, 9-, or 10-tenths of cloudiness during daylight.

Wind.—The direction and velocity of the wind are recorded at nearly all the stations on what is known as the "triple register." On these instruments the direction of the wind is recorded every minute. The maximum velocities given are for 5-minute periods.

Beginning with January 1, 1932, the Weather Bureau began the practice of applying corrections to all records of wind velocity obtained from rotating cup anemometers. Correction tables for both three-cup and four-cup anemometers have been made available to stations and hence values furnished to the public are on a comparable basis, regardless of the particular instrument employed.

Number of days.—The number of days with hail includes all of those on which at least a trace of hail fell.

The number of days with dense fog includes all of those on which fog was dense enough to obscure objects 1,000 feet distant. Fog of less density is recorded as light.

Time.—7:30 a. m. and 7:30 p. m., in this part, indicate seventy-fifth meridian time, except in a few instances, where footnotes specify otherwise.

References and abbreviations.—H, official elevation of station=height of the ground above sea level at station; H_b =height of barometer cistern above mean sea level on January 1, 1900, or when the station was established, if it was established since January 1, 1900, that being the elevation to which all previous readings have been reduced. It is designated as the "station, or adopted elevation." At almost all stations where a change has been made in the elevation of the barometer since January 1, 1900, a corresponding correction has been applied to the observed reading, thereby reducing all values to the "station, or adopted elevation." The actual elevation and the station, or adopted elevation, are identical, except at stations where the barometer has been moved since January 1, 1900; h_t =height of thermometer above ground; h_r =height of rain gage (top) above ground; h_a =height of anemometer (cups) above ground.

TABLE 15—Annual meteorological summaries for the year ended Dec. 31, 1937

ABILENE, TEX.

[$\phi=32^{\circ}27' N.$; $\lambda=99^{\circ}44' W.$]

Month	Pressure			Temperature								Moisture															
	Monthly mean	Extremes		Mean						Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation		Cloudiness						
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snow fall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>					
January	28.20	28.65	27.85	33.4	44.6	44.4	50.8	29.6	40.2	71	13	28	29	30	83	59	60	0.168	0.172	0.178	0.90	0.48	0.3	6.3	7.5	7.1	7.2
February	28.22	28.74	27.63	40.1	54.5	54.4	60.4	35.6	48.0	84	19	27	26	25	62	36	36	.149	.142	.141	.03	.03	T	3.9	5.0	5.2	5.3
March	28.22	28.55	27.75	42.3	56.0	57.4	62.1	40.1	51.1	82	25	34	34	34	74	50	48	.213	.216	.212	1.34	1.57	.1	6.1	5.9	5.2	5.5
April	28.07	28.45	27.68	54.8	75.2	75.7	80.2	52.7	66.4	95	32	42	40	38	64	32	30	.287	.273	.250	1.16	1.15	.0	4.7	4.3	3.6	4.2
May	28.12	28.42	27.87	64.6	81.4	83.2	86.9	62.7	74.8	95	51	55	54	52	71	41	37	.442	.441	.403	2.14	.86	.0	6.2	4.3	3.5	4.6
June	28.12	28.31	27.77	71.4	87.3	89.4	92.8	70.0	81.4	101	59	64	62	60	78	45	41	.597	.555	.531	2.82	1.24	.0	4.4	3.6	2.9	3.4
July	28.16	28.33	27.95	74.6	92.3	93.5	97.1	73.9	85.5	103	66	63	61	57	68	36	32	.579	.541	.479	2.22	.11	.0	4.3	5.0	3.8	4.5
August	28.16	28.36	27.95	75.8	94.1	93.1	98.6	75.0	86.8	105	70	64	61	60	68	35	36	.601	.542	.521	3.34	2.29	.0	3.4	4.5	4.0	3.8
September	28.20	28.47	28.00	68.8	86.9	85.7	91.3	67.5	79.4	99	51	57	56	54	67	37	37	.483	.472	.449	1.52	.57	.0	3.4	3.2	4.6	3.7
October	28.20	28.55	27.72	56.8	75.1	72.2	79.5	55.0	67.2	99	41	45	47	47	68	43	46	.313	.342	.331	2.70	1.62	.0	3.7	3.4	3.1	3.5
November	28.28	28.74	27.85	44.3	58.0	55.7	62.9	40.7	51.8	81	22	35	36	36	71	46	48	.229	.237	.234	.80	.54	1.7	4.7	4.6	4.7	4.6
December	28.28	28.65	27.82	40.3	49.2	47.9	53.2	37.5	45.4	72	21	36	38	38	86	67	70	.230	.247	.247	2.89	.83	.0	6.8	7.7	6.9	7.4
Year	28.19	28.74	27.63	55.6	71.2	71.0	76.3	53.4	64.8	105	13	46	45	44	72	44	43	.358	.348	.331	19.86	2.29	2.1	4.8	4.9	4.6	4.8

ALBANY, N. Y.

[$\phi=42^{\circ}39' N.$; $\lambda=73^{\circ}45' W.$]

January	30.16	30.84	29.41	29.7	35.0	34.1	40.2	25.9	33.0	55	11	24	24	25	78	66	69	0.139	0.144	0.144	2.61	0.56	5.4	7.3	7.3	6.2	7.4
February	29.88	30.38	29.16	26.2	32.5	31.8	38.0	22.9	30.4	55	8	18	19	18	71	56	55	.104	.109	.103	2.08	.76	1.7	6.8	6.0	5.4	6.4
March	29.81	30.33	29.27	27.6	34.3	32.7	38.3	24.4	31.4	58	14	18	16	18	65	49	55	.098	.097	.104	2.40	1.14	13.3	5.4	5.9	6.4	6.3
April	29.91	30.42	29.41	41.8	50.3	49.1	55.4	37.1	46.2	72	26	32	32	32	68	53	54	.182	.187	.185	1.89	.60	.1	6.6	7.1	5.8	6.8
May	29.84	30.31	29.54	55.7	67.1	65.8	73.4	50.3	61.8	92	38	46	45	46	71	49	52	.321	.316	.331	4.13	2.40	.0	5.6	5.5	4.9	5.1
June	29.80	30.19	29.37	65.0	74.4	71.7	78.4	59.3	68.8	93	54	56	56	57	74	55	62	.458	.457	.473	5.31	1.15	.0	4.9	6.2	6.9	6.1
July	29.85	30.07	29.46	69.3	80.7	76.9	84.8	64.1	74.4	98	55	61	59	62	76	50	62	.546	.520	.566	4.35	1.65	.0	4.4	4.7	5.7	5.2
August	29.95	30.22	29.61	69.7	80.7	76.5	84.9	65.9	75.4	97	56	64	64	66	83	58	72	.606	.605	.656	4.16	1.65	.0	5.2	4.4	5.4	5.4
September	29.96	30.48	29.40	55.2	66.9	63.3	71.5	51.7	61.6	91	39	51	50	53	85	58	70	.382	.388	.427	5.08	2.16	.0	4.1	4.8	3.5	4.7
October	29.93	30.58	29.14	47.0	55.7	52.3	59.5	42.9	51.2	81	27	40	39	40	78	54	64	.269	.258	.259	2.61	.93	.0	6.7	6.6	6.2	6.9
November	29.94	30.51	29.30	37.5	44.8	42.8	49.5	33.9	41.7	65	22	29	30	31	72	56	64	.167	.174	.184	1.83	.67	1.1	6.5	7.7	5.8	7.4
December	30.01	30.47	29.16	25.7	31.0	29.3	35.3	22.2	28.8	46	7	18	18	19	73	59	64	.104	.106	.107	2.05	.90	5.1	6.8	5.4	5.5	5.9
Year	29.92	30.84	29.14	45.9	54.4	52.2	59.1	41.7	50.4	98	7	38	38	39	74	55	62	.281	.280	.296	38.50	2.40	26.7	5.9	6.0	5.6	6.2

ALBUQUERQUE, N. MEX.¹[$\phi=35^{\circ}05' N.$; $\lambda=106^{\circ}43' W.$]

January	24.96	25.34	24.51	17.2	34.6	33.2	40.5	12.3	26.4	52	-1	11	16	15	76	45	47	0.071	0.086	0.085	0.21	0.21	4.0	3.0	4.1	4.9	3.9
February	25.04	25.44	24.41	26.8	45.0	47.6	52.2	22.4	37.3	67	10	18	20	20	69	37	35	.103	.110	.115	.11	.10	T	3.6	4.8	4.1	4.4
March	24.99	25.34	24.63	32.4	50.8	52.8	57.4	29.4	43.4	71	20	23	24	23	69	38	35	.125	.132	.126	.63	.38	4.4	5.0	5.7	5.7	5.3
April	24.95	25.26	24.53	39.4	64.4	67.1	70.8	37.1	54.0	86	29	33	22	18	53	21	17	.124	.118	.099	.42	.39	1.5	2.7	3.2	3.9	3.3
May	25.00	25.34	24.67	50.8	74.6	75.3	80.0	49.0	64.5	92	36	35	34	30	58	27	27	.218	.207	.182	2.78	1.24	.0	3.4	3.4	4.7	3.5
June	25.04	25.22	24.68	57.3	81.3	81.5	86.6	55.0	70.8	99	46	42	39	37	59	26	27	.284	.262	.244	1.91	.99	.0	3.4	3.2	4.7	3.6
July	25.10	25.29	24.95	63.3	86.3	85.6	91.7	61.8	76.8	99	55	53	51	48	70	31	30	.408	.386	.345	1.02	.46	.0	2.6	2.5	6.1	3.7
August	25.11	25.28	24.88	64.3	87.9	87.1	93.1	62.5	77.8	100	58	53	53	49	68	31	28	.406	.400	.351	.22	.08	.0	3.6	2.1	5.4	4.3
September	25.12	25.32	24.95	57.6	79.0	77.9	84.5	55.3	69.9	93	43	48	50	47	73	39	38	.356	.376	.336	.87	.19	.0	3.8	2.9	4.6	3.4
October	25.10	25.34	24.84	45.2	68.2	67.5	73.2	42.8	58.0	83	34	37	36	36	73	33	34	.224	.223	.220	.79	.78	.0	2.4	2.5	2.9	2.5
November	25.09	25.40	24.77	32.8	56.0	52.5	61.3	20.9	45.6	73	19	22	26	25	64	32	34	.122	.144	.135	.01	.01	.0	1.9	3.4	3.1	2.9
December	25.10	25.44	24.71	29.2	45.9	42.1	50.7	24.9	37.8	62	17	24	27	26	80	48	53	.129	.145	.140	.48	.45	1.0	3.8	4.5	4.2	4.2
Year	25.05	25.44	24.41	43.0	64.5	64.2	70.2	40.2	55.2	100	-1	32	33	31	68	34	34	.214	.216	.198	9.45	1.24	10.9	3.3	3.5	4.5	3.8

ALPENA, MICH.

[$\phi=45^{\circ}04' N.$; $\lambda=83^{\circ}30' W.$]

January	29.43	30.06	28.56	21.4	-----	25.0	31.7	16.4	24.0	46	-2	16	-----	19	78	-----	75	0.096	-----	0.107	1.55	0.50	6.4	6.5	-----	5.9	6.5
February	29.24	29.95	28.44	20.8	-----	25.4	30.8	17.6	24.2	47	6	16	-----	19	81	-----	76	.095	-----	.110	1.02	.48	5.2	7.2	-----	6.2	6.9
March	29.37	29.72	28.81	21.8	-----	27.2	32.4	18.5	25.4	42	2	17	-----	17	80	-----	64	.095	-----	.095	.24	.07	7.6	5.8	-----	4.5	6.0
April	29.29	29.75	28.74	36.4	-----	40.0	44.9	33.3	39.1	58	23	31	-----	33	82	-----	76	.179	-----	.189	3.15	1.13	.5	5.6	-----	7.3	7.1
May	29.33	29.72	28.96	49.4	-----	54.7	62.0	43.9	53.0	93	34	41	-----	42	73	-----	64	.267	-----	.275	.90	.33	.0	5.3	-----	4.2	5.1
June	29.28	29.63	29.01	58.9	-----	63.9	70.2	53.2	61.7	82	42	51	-----	52	76	-----	66	.381	-----	.390	2.55	1.30	.0	5.1	-----	4.9	5.7
July	29.29	29.52	28.79	65.1	-----	70.4	78.0	60.1	69.0	97	48	58	-----	60	78	-----	71	.489	-----	.525	3.75	1.37	.0	4.0	-----	4.3	4.5
August	29.40	29.67	29.13	65.6	-----	72.4	79.1	61.7	70.4	94	49	60	-----	64	84	-----	75	.529	-----	.597	3.31	2.15	.0	4.2	-----	5.3	5.1
September	29.40	29.77	28.80	53.0	-----	58.7	66.6	49.3	58.0	91	35	48	-----	50	84	-----	74	.359	-----	.391	7.43	4.40	.0	5.1	-----	5.2	5.8
October	29.32	29.93	28.37	41.5	-----	44.7	50.0	38.2	44.1	69	25	37	-----	38	84	-----	78	.231	-----	.242	1.82	.72	.3	7.2	-----	6.6	7.0
November	29.29	29.83	28.60	33.5	-----	35.9	41.4	30.3	35.8	59	18	29	-----	28	82	-----	73	.161	-----	.160	1.75	.63	3.2	8.2	-----	6.6	8.0
December	29.38	29.97	28.78	22.6	-----	24.5	28.6	17.8	23.2	39	6	18	-----	18	80	-----	76	.099	-----	.102	.90	.32	8.8	8.5	-----	8.3	8.1
Year	29.33	30.06	28.37	40.8	-----	45.2	51.3	36.7	44.0	97	-2	35	-----	37	80	-----	72	.248	-----	.265	28.37	4.40	32.0	6.1	-----	5.8	6.4

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

ABILENE, TEX.

[H=1,726 ft.; H_b=1,738 ft.; h_i=10 ft.; h_r=3 ft.; h_a=56 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from											Precipitation	Snow			Fog	Maximum temp.		32°	Elec- tricity				
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	9.1	N.	28	S.	0	19	4	4	10	11	5	6	3	2	5	6	20	7	3	7	1	0	8	2	5	0	19	1	0
February	11.0	S.	34	W.	1	14	3	4	3	19	8	3	2	0	13	3	12	2	0	1	0	1	0	0	0	0	10	0	0
March	11.5	N.	36	SW.	3	15	4	5	11	13	1	7	6	0	9	10	12	8	5	3	1	0	4	0	0	0	7	4	0
April	12.3	S.	30	W.	0	7	1	4	9	24	1	6	8	0	15	6	9	2	1	0	0	0	1	0	0	4	1	2	0
May	11.1	S.	34	SW.	1	7	3	7	17	23	0	1	3	1	11	13	7	9	6	0	0	2	0	0	0	14	0	9	0
June	10.2	S.	27	S.	0	4	2	7	24	20	1	1	1	0	19	7	4	6	5	0	0	0	3	0	0	21	0	8	0
July	10.3	S.	28	NW.	0	4	0	3	13	39	1	0	2	0	12	13	6	4	2	0	0	0	1	0	0	28	0	7	0
August	8.7	SE.	25	SW.	0	2	1	12	25	20	0	2	0	0	16	10	5	7	5	0	0	0	0	0	0	29	0	7	0
September	8.6	S.	25	S.	0	6	4	7	16	24	1	2	0	0	16	8	6	4	3	0	0	0	0	0	0	22	0	4	0
October	8.9	S.	27	N.	0	12	3	5	8	26	2	3	3	0	19	3	9	5	5	0	0	0	2	0	0	5	0	1	0
November	9.6	S.	27	S.	0	16	4	3	8	16	5	2	6	0	13	11	6	4	4	1	1	0	2	1	0	0	10	0	0
December	8.4	S.	24	S.	0	15	5	4	7	17	2	7	4	1	5	7	19	11	8	0	0	0	6	2	1	0	8	0	0
Year	10.0	S.	36	SW.	5	121	34	65	151	252	27	40	38	2	153	97	115	69	47	12	3	2	28	5	6	123	55	43	0

ALBANY, N. Y.

[H=19 ft.; H_b=97 ft.; h_i=97 ft.; h_r=88 ft.; h_a=112 ft.]

January	7.9	S.	27	S.	0	15	6	1	1	15	11	3	10	0	7	5	19	18	13	15	8	0	7	0	4	0	23	0	0
February	8.1	NW.	34	SE.	1	13	3	0	3	7	6	7	17	0	6	7	15	7	5	16	3	0	4	1	5	0	25	0	0
March	8.0	NW.	24	S.	0	11	4	0	0	2	5	18	22	0	9	6	16	12	7	18	9	0	2	0	7	0	27	0	0
April	8.0	S.	24	SE.	0	9	6	2	6	14	0	11	12	0	7	8	15	15	12	5	2	0	2	0	0	0	4	2	0
May	6.9	S.	21	S.	0	12	2	0	4	15	7	8	14	0	9	11	11	12	10	0	0	0	10	0	0	1	0	3	2
June	6.9	S.	24	N.	0	13	6	0	6	18	4	7	6	0	6	11	13	12	11	0	0	0	13	2	0	1	0	7	0
July	6.8	S.	24	SW.	0	9	4	1	1	22	12	5	8	0	11	11	9	11	9	0	0	0	7	2	0	9	0	6	0
August	6.1	S.	22	S.	0	8	1	1	1	27	12	5	7	0	8	12	11	11	9	0	0	1	11	2	0	5	0	5	0
September	6.2	S.	27	S.	0	15	1	0	2	17	6	10	9	0	13	9	8	10	10	0	0	0	14	5	0	1	0	3	0
October	8.3	S.	27	SE.	0	12	0	0	3	21	7	7	12	0	3	14	14	15	10	0	0	0	8	2	0	0	3	1	2
November	6.9	NW.	27	SE.	0	5	3	1	3	9	7	16	16	0	3	10	17	12	11	7	2	0	8	3	0	0	14	0	0
December	6.9	NW.	18	S.	0	16	2	1	1	13	3	10	16	0	9	9	13	13	8	17	11	0	7	0	8	0	28	0	0
Year	7.2	S.	34	SE.	1	138	38	7	31	180	80	107	149	0	91	113	161	148	115	78	35	1	93	17	24	17	124	27	4

ALBUQUERQUE, N. MEX.

[H=5,101 ft.; H_b=4,972 ft.; h_i=5 ft.; h_r=15 ft.; h_a=39 ft.]

January	8.0	N.	35	SW.	3	20	9	1	2	2	6	12	10	0	14	11	6	1	1	5	1	0	0	0	3	0	31	0	0
February	9.5	N.	42	SW.	4	15	2	5	1	6	5	7	14	1	14	7	7	2	1	4	0	0	1	2	0	0	24	0	0
March	11.2	N.	49	W.	9	10	5	3	10	10	1	9	14	0	9	15	7	7	5	7	5	0	0	0	0	0	25	0	0
April	10.6	W.	42	NW.	7	9	1	0	5	7	1	17	14	0	19	7	4	3	2	1	1	0	0	0	0	0	7	2	0
May	9.7	SE.	52	W.	7	14	2	6	10	5	4	5	14	2	17	8	6	7	6	0	0	2	0	0	0	0	8	0	0
June	8.7	N.	42	NW.	6	16	3	1	8	12	2	3	13	2	16	11	3	6	5	0	0	0	0	0	0	11	0	7	0
July	7.2	N.	33	W.	2	14	7	6	5	6	7	7	6	4	15	13	3	9	4	0	0	1	0	0	0	23	0	12	0
August	7.9	SE.	30	SW.	0	17	2	0	8	10	9	5	11	0	10	21	0	7	3	0	0	0	0	0	0	26	0	11	0
September	7.5	N.	40	NW.	3	19	4	2	7	8	10	1	9	0	19	8	3	9	8	0	0	1	0	0	0	5	0	11	0
October	7.4	N.	38	NW.	1	18	3	8	3	13	3	2	12	0	21	7	3	3	2	0	0	0	0	0	0	0	0	1	0
November	6.8	N.	33	NW.	1	17	1	2	1	11	9	5	13	1	18	9	3	1	0	0	0	0	0	0	0	0	20	0	0
December	7.5	N.	31	SE.	0	17	6	5	2	8	6	9	8	1	17	2	12	3	2	3	1	0	1	0	0	0	27	0	0
Year	8.5	N.	52	W.	43	186	45	39	62	98	69	82	138	11	189	119	57	58	39	20	8	5	2	2	3	68	134	52	0

ALPENA, MICH.

[H=587 ft.; H_b=609 ft.; h_i=13 ft.; h_r=4 ft.; h_a=89 ft.]

January	13.3	W.	41	SE.	4	3	0	5	7	9	8	19	11	0	7	6	18	10	6	17	5	0	2	1	13	0	30	0	0
February	12.7	NW.	37	SE.	2	2	2	3	9	11	6	10	13	0	5	8	15	9	5	19	7	0	1	1	18	0	26	0	3
March	12.1	NW.	29	NW.	0	5	5	4	4	1	3	12	28	0	7	11	13	9	1	17	9	0	0	0	0	0	31	0	0
April	13.2	NW.	43	E.	3	6	4	12	10	7	1	3	17	0	6	7	17	15	10	3	3	0	8	2	0	0	13	1	1
May	10.2	NW.	30	NW.	0	5	4	1	16	9	4	2	20	1	11	9	11	7	4	0	0	0	2	0	0	1	0	3	3
June	9.8	NW.	30	NW.	0	6	2	4	9	12	4	6	17	0	8	10	12	8	6	0	0	0	6	2	0	0	0	2	0
July	9.0	NW.	30	NW.	0	2	5	3	15	6	5	13	13	0	11	16	4	10	9	0	0	0	1	0	0	4	0	3	2
August	8.2	SE.	25	SE.	0	1	5	1	13	9	12	8	12	1	13	8	10	8	7	0	0	0	2	1	0	1	0	6	0
September	10.1	NW.	32	NW.	1	4	3	0	10	11	8	8	16	0	5	15	10	12	11	0	0	0	0	0	0	0	6	0	4
October	11.3	NW.	38	S.	3	4	3	2	9	12	4	14	14	0	2	10	19	18	10	8	5	0	7	3	0	0	18	2	0
November	11.9	SW.	35	SW.	2	2	1	2	6	12	15	9	13	0	2	8	20	13	9	11	5	0	5	3	0	0	31	0	0
December	11.2	NW.	38	E.	1	1	2	3	2	11	8	12	23	0	2	6	23	12	6	23	11	0	0	0	0	0	27	0	2
Year	11.1	NW.	43	E.	16	41	36	40	110	110	78	116	197	2	79	114	172	131	84	98	45	0	35	13	72	8	155	26	17

TABLE 15.—Annual meteorological summaries for the year ended December 31, 1937—Continued

AMARILLO, TEX.

[$\phi=53^{\circ}13' N.$; $\lambda=101^{\circ}50' W.$]

Month	Pressure			Temperature								Moisture															
	Monthly mean	Extremes		Mean						Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation		Cloudiness							
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In</i>	<i>In.</i>	<i>In.</i>					
January	26.18	26.62	25.70	22.7	36.9	36.4	42.7	18.8	30.8	64	0	14	17	15	68	49	47	0.083	0.098	0.089	0.29	0.27	3.1	3.3	4.7	4.4	4.6
February	26.22	26.72	25.53	30.7	45.4	47.7	53.2	27.7	40.4	75	11	18	19	18	60	40	34	.098	.105	.100	.18	.13	1.1	3.9	5.8	4.9	6.0
March	26.26	26.61	25.72	33.7	51.0	51.0	56.5	31.9	44.2	75	17	26	26	25	74	44	41	.150	.147	.140	1.10	.51	4.2	3.6	5.0	4.0	4.9
April	26.16	26.55	25.77	45.6	65.7	67.6	71.4	43.6	57.5	94	30	31	28	26	60	29	25	.182	.162	.146	.39	.28	1.1	2.8	3.2	4.2	4.0
May	26.22	26.61	25.87	56.8	74.3	75.7	78.8	55.9	67.4	93	44	47	47	44	71	42	37	.332	.345	.308	6.83	2.14	.0	4.3	5.2	5.8	5.0
June	26.25	26.44	25.84	63.7	80.7	83.2	85.8	63.0	74.4	97	46	55	55	54	75	44	41	.446	.438	.428	2.83	1.21	.0	4.5	3.1	3.8	3.8
July	26.29	26.46	26.06	68.6	89.3	91.2	94.2	67.9	81.0	101	60	56	53	51	66	30	27	.457	.407	.377	1.49	.57	.0	4.4	2.9	4.1	3.6
August	26.30	26.46	26.11	70.9	89.2	90.2	94.2	70.0	82.1	103	65	57	56	54	64	34	32	.474	.445	.431	.64	.22	.0	5.3	4.5	4.1	4.5
September	26.33	26.67	26.13	63.1	80.1	78.7	84.4	61.8	73.1	99	45	54	52	52	72	40	43	.432	.403	.412	2.61	1.63	.0	4.9	3.7	3.8	4.2
October	26.30	26.65	25.85	51.3	69.6	66.9	75.0	48.5	61.8	90	36	38	40	38	64	39	40	.240	.253	.235	.31	.21	.0	3.5	4.2	3.4	3.9
November	26.31	26.69	25.84	37.8	54.5	51.4	59.9	35.2	47.6	83	16	25	28	25	60	37	37	.141	.158	.138	.14	.07	1.1	4.8	5.6	3.8	5.6
December	26.30	26.70	25.84	31.8	45.9	43.1	51.6	28.4	40.0	71	18	23	26	25	71	49	53	.125	.142	.138	.29	.28	2.3	4.8	5.7	5.0	5.8
Year	26.26	26.72	25.53	48.1	65.2	65.3	70.6	46.1	58.4	103	0	37	37	36	67	40	38	.263	.259	.245	17.10	2.14	12.9	4.2	4.5	4.3	4.7

APALACHICOLA, FLA.

[$\phi=29^{\circ}45' N.$; $\lambda=84^{\circ}58' W.$]

January	30.10	30.31	29.91	62.1	67.6	64.8	69.4	59.9	64.6	76	45	60	62	62	94	82	91	0.532	0.568	0.567	1.31	0.68	0.0	7.2	7.2	6.5	8.1
February	30.03	30.40	29.69	52.3	60.7	58.3	64.9	49.1	57.0	74	36	46	46	48	80	62	70	.339	.348	.363	5.42	2.22	.0	5.5	5.8	6.6	6.4
March	30.01	30.40	29.71	53.6	62.7	60.3	66.1	50.4	58.2	77	36	48	48	50	83	60	72	.370	.361	.391	4.21	2.25	.0	6.0	5.9	5.3	5.7
April	29.97	30.38	29.70	63.1	70.8	67.2	72.6	59.8	66.2	85	49	58	57	58	84	65	75	.499	.499	.512	7.18	4.61	.0	5.0	5.7	5.1	5.2
May	29.96	30.12	29.79	71.5	80.1	76.1	81.8	67.3	74.6	93	60	66	66	65	84	63	70	.650	.641	.624	3.43	1.55	.0	4.0	3.8	4.6	4.0
June	29.95	30.13	29.66	79.4	86.2	81.6	87.6	74.3	81.0	92	69	72	71	71	79	62	72	.795	.761	.763	3.83	1.92	.0	4.4	5.2	6.1	5.5
July	30.01	30.18	29.80	80.0	85.2	82.6	88.3	75.4	81.8	94	73	74	73	73	82	67	72	.836	.807	.808	2.95	.81	.0	5.0	6.2	6.9	6.4
August	29.98	30.18	29.82	78.7	84.3	82.0	87.1	74.9	81.0	91	70	74	74	74	86	72	76	.841	.847	.830	8.59	1.79	.0	5.7	6.8	7.4	6.9
September	29.95	30.18	29.67	73.2	81.7	77.8	83.7	70.9	77.3	92	61	69	70	69	87	68	76	.719	.732	.718	5.87	2.67	.0	4.5	5.6	6.5	5.5
October	29.96	30.16	29.68	64.9	74.2	69.9	76.2	62.1	69.2	87	42	60	61	62	86	67	76	.564	.592	.591	2.08	1.44	.0	5.0	5.6	3.7	5.1
November	30.04	30.47	29.48	52.3	63.0	58.4	65.9	49.1	57.5	78	28	47	49	49	83	63	72	.354	.384	.372	4.06	2.59	.0	4.9	4.7	3.0	4.9
December	30.13	30.36	29.75	47.2	56.4	53.0	58.9	44.3	51.6	71	23	43	45	45	85	66	76	.303	.323	.322	1.71	0.55	.0	4.9	3.8	3.0	4.4
Year	30.01	30.47	29.48	64.9	72.7	69.3	75.2	61.5	68.3	94	23	60	60	60	84	66	75	.567	.572	.572	50.64	4.61	.0	5.2	5.5	5.4	5.7

ASHEVILLE, N. C.

[$\phi=35^{\circ}36' N.$; $\lambda=82^{\circ}32' W.$]

January	27.82	28.13	27.38	46.7	52.2	49.9	56.5	42.7	49.6	74	26	43	43	43	86	73	79	0.292	0.298	0.296	6.87	1.60	0.0	8.4	8.7	8.2	8.3
February	27.65	28.03	27.09	32.8	41.8	39.0	47.4	28.5	38.0	70	14	26	26	26	76	54	62	.156	.156	.157	2.73	.84	7.0	6.8	6.6	6.7	6.4
March	27.63	28.04	27.29	35.7	50.0	48.5	55.8	33.0	44.4	74	20	30	29	29	79	47	48	.173	.172	.167	.74	.28	.6	5.3	5.5	4.6	5.2
April	27.63	28.03	27.28	46.9	59.1	57.2	65.6	42.7	54.2	84	30	39	39	39	75	52	54	.251	.249	.253	3.51	1.23	.0	5.4	6.4	6.2	5.8
May	27.70	27.94	27.43	56.5	71.9	67.3	77.0	51.6	64.3	89	41	49	48	49	78	44	54	.368	.354	.366	2.45	.70	.0	3.9	4.9	5.7	4.9
June	27.68	27.88	27.38	65.6	78.5	73.7	83.7	61.5	72.6	89	55	62	60	62	87	55	68	.547	.521	.553	4.13	1.14	.0	5.1	6.5	6.5	5.9
July	27.75	27.95	27.53	66.0	79.9	74.9	84.5	62.1	73.3	93	49	62	61	62	87	53	67	.560	.536	.572	4.18	1.23	.0	4.9	5.9	7.5	5.4
August	27.79	28.01	27.64	66.1	81.5	73.9	85.0	63.8	74.4	92	58	64	64	65	94	57	76	.604	.600	.627	5.29	1.64	.0	4.2	6.4	7.4	6.2
September	27.77	28.10	27.46	57.4	72.3	66.3	76.5	55.1	65.8	87	45	55	55	57	93	55	72	.451	.443	.476	.67	.26	.0	3.9	4.7	5.5	4.9
October	27.72	28.10	27.27	45.9	58.8	54.0	62.7	42.2	52.4	82	28	42	42	44	88	58	70	.292	.299	.309	5.89	3.15	.9	6.2	6.3	5.3	6.3
November	27.76	28.21	27.26	35.9	50.4	45.3	54.1	32.4	43.2	72	13	31	30	32	82	50	62	.188	.190	.201	.64	.24	.1	4.7	5.2	4.6	4.8
December	27.77	28.14	27.30	32.7	43.1	40.3	48.0	28.7	38.4	68	5	28	30	30	82	60	68	.170	.181	.183	1.57	.64	.7	6.7	6.5	4.7	6.2
Year	27.72	28.21	27.09	49.0	61.6	57.5	66.4	45.4	55.9	93	5	44	44	45	84	55	65	.338	.333	.347	38.67	3.15	9.3	5.5	6.1	6.1	5.9

ATLANTA, GA.

[$\phi=33^{\circ}39' N.$; $\lambda=84^{\circ}26' W.$]

January	29.13	29.42	28.80	49.7	54.4	53.5	59.5	46.5	53.0	76	32	48	49	49	94	84	85	0.352	0.367	0.362	8.88	1.92	0.0	8.3	9.1	7.6	9.2
February	29.02	29.44	28.57	38.2	48.5	46.6	54.0	34.9	44.4	73	20	32	33	33	79	56	59	.202	.205	.202	4.52	1.72	.0	6.0	6.3	5.6	6.0
March	28.99	29.41	28.61	41.4	56.6	54.4	61.7	39.3	50.5	76	26	35	36	37	79	49	53	.219	.233	.236	2.73	1.00	.0	5.0	4.6	5.2	5.2
April	28.95	29.39	28.64	52.2	65.7	64.0	70.9	48.5	59.7	87	36	44	45	44	76	51	53	.311	.317	.319	8.61	3.72	.0	4.6	4.9	4.8	4.7
May	28.98	29.16	28.76	64.2	78.0	75.0	82.0	59.8	70.9	94	48	56	54	57	74	46	56	.458	.438	.481	2.32	1.05	.0	3.9	4.6	5.4	5.0
June	28.96	29.16	28.65	73.4	85.4	81.9	90.2	68.9	79.6	97	63	67	65	65	80	52	59	.661	.623	.623	6.06	2.20	.0	5.7	6.8	7.4	6.5
July	29.01	29.22	28.84	72.6	85.5	83.0	89.6	69.5	79.6	97	58	67	65	66	82	52	58	.660	.635	.650	2.30	1.26	.0	5.6	6.0	6.1	6.1
August	29.04	29.27	28.90	72.1	85.3	78.6	89.3	69.7	79.5	95	66	69	69	70	91	59	76	.713	.701	.724	5.50	1.68	.0	5.2	7.0	7.3	6.8
September	29.03	29.35	28.73	63.7	77.0	72.8	81.1	61.2	71.2	93	51	60	60	60	89	57	63	.537	.530	.541	.95	.78	.0	3.8	5.7	3.7	5.0
October	29.02	29.39	28.68	52.2	64.3	59.5	67.8	49.9	58.8	85	29	48	48	50	86	60	73	.363	.377	.400	6.30	3.27	.0	5.1	4.9	5.1	5.3
November	29.08	29.59	28.64	40.3	54.0	48.5	57.3	37.6	47.4	72	19	34	36	37	78	53	65	.214	.233	.238	.85	.37	T	5.4	4.9	4.0	4.8
December	29.13	29.46	28.67	36.7	48.4	44.5	52.0	34.2	43.1	69	10	31	34	34	80	58	69	.194	.220	.224	1.49	.84	.7	5.9	6.5	5.9	6.6
Year	29.03	29.59	28.57	54.7	66.9	63.5	71.3	51.7	61.5	97	10	49	50	50	82	56	64	.407	.407	.417	50.51	3.72	.7	5.4	5.9	5.7	5.9

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

AMARILLO, TEX.

[H=3,657 ft.; H_b=3,676 ft.; h₁=10 ft.; h_r=3 ft.; h_a=49 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Precip- itation	Snow	Fog	Maxi- mum temp.	32° temperature or below	Elec- tricity										
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum	Thunderstorm	Aurora
January	9.7	S.	28	W.	0	7	4	3	6	13	12	12	5	0	14	6	11	2	1	2	0	10	4	5	0	28	0	0	
February	11.1	SW.	30	SW.	0	8	1	7	7	7	12	8	5	1	8	8	12	3	2	5	2	0	3	1	1	0	16	0	0
March	11.0	SE.	37	W.	2	8	8	6	9	7	10	7	7	0	11	12	8	6	5	5	2	0	3	2	2	0	13	0	0
April	11.0	SW.	32	NW.	1	10	5	4	7	7	12	11	4	0	15	10	5	3	3	1	1	0	0	0	1	2	2	0	0
May	10.2	SE.	32	SE.	1	8	4	0	21	12	7	7	3	0	12	11	8	13	11	0	0	0	0	0	2	0	11	0	0
June	9.6	SE.	35	SE.	1	3	6	5	20	13	8	4	1	0	15	11	4	8	6	0	0	1	2	1	0	14	0	7	0
July	9.0	S.	27	NE.	0	3	2	2	9	20	16	8	2	0	17	12	2	5	4	0	0	0	0	0	0	25	0	7	0
August	9.1	S.	25	SE.	0	2	1	5	21	17	13	2	0	0	11	15	5	7	3	0	0	0	1	0	0	24	0	7	0
September	9.1	S.	27	SW.	0	3	7	6	9	20	7	6	2	0	13	12	5	8	5	0	0	0	2	0	0	7	0	5	0
October	8.9	S.	31	NW.	0	8	4	2	6	12	16	5	9	0	17	6	8	5	2	0	0	0	6	1	0	1	0	1	0
November	9.5	S.	30	N.	0	9	8	5	8	12	9	2	7	0	9	9	12	4	1	4	3	0	0	0	0	14	0	0	0
December	9.5	SW.	26	W.	0	8	7	4	5	8	11	7	11	1	11	7	13	3	2	4	3	0	4	1	3	0	21	0	0
Year	9.8	S.	37	W.	5	77	57	49	128	148	130	82	57	2	153	119	93	67	45	21	13	1	31	10	11	74	94	40	0

APALACHICOLA, FLA.

[H=13 ft.; H_b=35 ft.; h₁=11 ft.; h_r=3 ft.; h_a=51 ft.]

January	9.5	SE.	25	E.	0	5	10	14	22	8	3	0	0	0	0	9	22	11	7	0	0	0	20	8	0	0	0	0	0
February	10.6	N.	26	N.	0	17	9	3	3	9	2	3	10	0	6	8	14	9	9	0	0	0	8	1	0	0	0	2	0
March	8.2	N.	29	SE.	0	16	7	4	9	6	7	5	8	0	7	12	12	6	6	0	0	0	5	1	0	0	0	4	0
April	8.8	S.	26	E.	0	8	2	4	11	11	9	7	8	0	11	8	11	7	5	0	0	1	8	3	0	0	0	5	0
May	7.8	NW.	42	SE.	2	13	3	3	8	4	8	14	8	1	16	10	5	5	3	0	0	0	3	0	0	3	0	7	0
June	7.3	W.	26	SE.	0	5	10	1	4	7	7	21	4	1	8	13	9	12	9	0	0	0	0	0	0	5	0	20	0
July	6.6	W.	26	SE.	0	6	10	1	4	6	10	19	6	0	4	16	11	15	13	0	0	0	0	0	0	7	0	19	0
August	6.5	SE.	28	S.	0	11	13	5	7	9	2	8	7	0	5	11	15	15	14	0	0	0	1	0	0	1	0	18	0
September	8.2	NE.	30	S.	0	17	17	3	4	6	4	4	5	0	11	7	12	10	8	0	0	0	0	0	0	1	0	10	0
October	9.5	NW.	30	SE.	0	8	15	5	6	6	6	4	12	0	12	6	13	11	7	0	0	0	1	1	0	0	0	0	0
November	9.2	N.	29	E.	0	18	18	7	2	0	2	3	9	1	13	5	12	7	6	0	0	0	5	4	0	0	2	2	0
December	7.8	N.	27	N.	0	23	5	16	1	3	4	3	5	2	14	8	9	7	6	0	0	0	11	6	0	0	4	1	0
Year	8.3	N.	42	SE.	2	147	119	66	81	75	64	91	82	5	107	113	145	115	93	0	0	1	62	24	0	17	6	88	0

ASHEVILLE, N. C.

[H=2,192 ft.; H_b=2,253 ft.; h₁=89 ft.; h_r=87 ft.; h_a=104 ft.]

January	10.4	SE.	25	SE.	0	15	1	1	35	8	0	1	1	0	0	11	20	17	15	0	0	0	9	2	0	0	3	0	0
February	10.9	N.	29	NW.	0	24	0	1	14	5	0	0	9	3	8	4	16	15	10	9	4	0	6	1	3	0	18	0	0
March	10.3	NW.	27	NW.	0	16	0	0	10	6	0	1	25	4	11	10	10	9	8	4	2	0	5	1	0	0	14	1	0
April	9.7	NW.	31	E.	0	13	0	4	15	11	0	3	13	1	8	10	12	10	9	2	0	1	1	1	0	0	2	4	0
May	7.8	NW.	31	NW.	0	10	0	4	11	12	2	3	16	4	10	17	4	14	8	0	0	1	11	5	0	0	0	11	0
June	6.1	NW.	32	SE.	1	13	1	1	9	4	1	3	19	9	4	20	6	16	15	0	0	0	16	6	0	0	0	16	0
July	6.0	NW.	21	SW.	0	17	2	4	9	12	0	1	17	0	7	17	7	14	13	0	0	0	19	3	0	5	0	11	0
August	5.6	S.	21	SE.	0	10	1	5	17	10	0	4	6	9	5	15	11	17	13	0	0	0	18	10	0	3	0	16	0
September	6.4	S.	20	SE.	0	12	1	7	17	13	0	0	7	3	13	10	7	6	5	0	0	0	16	7	0	0	0	5	0
October	8.5	N.	34	N.	1	19	0	2	19	7	0	0	4	11	8	10	13	13	12	3	2	0	9	3	0	0	5	1	0
November	9.0	N.	25	N.	0	22	0	1	14	10	0	2	8	3	14	5	11	11	5	2	1	0	5	1	2	0	15	0	0
December	7.6	N.	25	SE.	0	19	0	2	8	10	1	1	14	7	9	5	17	9	5	5	3	0	7	2	5	0	19	0	0
Year	8.2	N.	34	N.	2	190	6	32	178	108	4	19	139	54	97	134	134	151	118	25	12	2	122	42	10	8	76	65	0

ATLANTA, GA.

[H=976 ft.; H_b=976 ft.; h₁=5 ft.; h_r=38 ft.; h_a=53 ft.]

January	9.0	E.	25	SW.	0	7	8	19	11	8	2	1	6	0	0	3	28	18	14	0	0	0	25	16	0	0	0	1	0
February	11.3	NW.	32	NW.	2	9	2	7	3	7	3	6	18	1	8	6	14	10	8	0	0	0	6	2	0	0	12	2	0
March	10.3	NW.	34	NW.	1	5	4	3	1	7	4	6	32	0	12	7	12	9	7	0	0	0	6	3	0	0	10	0	0
April	9.4	NW.	31	SE.	0	3	3	6	2	10	9	12	15	0	14	5	11	11	8	0	0	4	2	0	0	0	9	0	0
May	7.4	NW.	32	SW.	1	14	4	8	3	8	4	6	14	1	10	14	7	9	8	0	0	1	0	0	0	6	0	7	0
June	7.0	W.	35	SW.	2	6	4	2	2	12	7	14	13	0	2	18	10	12	8	0	0	0	1	0	0	15	0	15	0
July	7.0	NW.	29	SW.	0	5	3	9	3	8	8	11	15	0	3	18	10	7	5	0	0	0	2	0	0	17	0	9	0
August	5.6	S.	29	SW.	0	7	9	10	8	16	5	1	3	3	3	16	12	17	14	0	0	0	15	5	0	20	0	16	0
September	6.6	NE.	22	NW.	0	8	18	6	7	6	0	4	8	3	11	10	9	3	2	0	0	0	7	3	0	4	0	3	0
October	9.1	NW.	28	NW.	0	4	14	9	4	5	3	8	12	3	15	3	13	12	12	0	0	0	13	3	0	0	1	1	0
November	8.7	NW.	29	NW.	0	8	14	5	0	5	0	4	17	7	13	7	10	9	6	2	0	0	6	1	1	0	9	0	0
December	7.9	NW.	31	NW.	0	8	5	9	2	9	4	7	18	0	9	4	18	6	5	2	1	0	12	4	1	0	11	0	0
Year	8.3	NW.	35	SW.	6	84	88	93	46	101	49	80	171	18	100	111	154	123	97	4	1	1	97	39	2	62	43	63	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

ATLANTIC CITY, N. J.

[$\phi=39^{\circ}22'$ N.; $\lambda=74^{\circ}25'$ W.]

Month	Pressure			Temperature										Moisture															
	Extremes			Mean						Extremes		Dew point	Relative humidity		Vapor pressure			Precipitation			Cloudiness								
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snow fall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight		
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>						
January	30.20	30.72	29.54	41.9	44.8	44.3	49.1	37.7	43.4	61	28	37	39	38	82	81	80	0.229	0.251	0.241	6.88	1.59	0.0	8.7	9.0	7.6	9.3		
February	29.94	30.35	29.32	32.7	39.0	38.0	42.5	29.6	36.0	57	18	26	29	28	74	66	67	.147	.165	.161	3.05	.91	7.0	6.0	7.1	5.8	7.0		
March	29.88	30.42	29.42	36.0	43.0	40.4	47.0	33.1	40.0	58	21	26	27	28	66	55	63	.147	.154	.161	3.00	1.38	.1	5.5	5.9	4.5	5.7		
April	29.94	30.44	29.42	46.9	51.8	48.1	55.6	43.5	49.6	73	34	39	38	40	74	63	74	.243	.240	.251	4.22	1.11	.0	6.4	6.3	7.3	6.8		
May	29.93	30.33	29.56	59.2	64.1	60.3	68.1	53.4	60.8	86	43	50	50	51	74	65	74	.380	.383	.386	1.85	.71	.0	4.6	5.1	5.8	5.2		
June	29.86	30.20	29.42	68.2	71.5	68.7	75.5	63.5	69.5	87	54	62	63	63	81	75	82	.557	.572	.576	3.45	.72	.0	6.6	7.0	8.2	7.2		
July	29.92	30.12	29.61	74.2	79.1	75.7	82.0	69.5	75.8	97	61	67	66	67	78	67	75	.662	.659	.671	.96	.50	.0	4.8	5.0	5.9	5.2		
August	30.01	30.25	29.75	72.5	76.5	73.3	79.2	68.8	74.0	90	65	69	70	70	88	80	90	.707	.725	.732	6.13	2.71	.0	4.9	5.2	5.5	5.2		
September	30.01	30.47	29.54	63.4	70.2	66.4	72.4	59.2	65.8	84	47	57	58	57	80	66	72	.484	.502	.483	1.07	.48	.0	3.3	4.5	3.8	4.3		
October	30.00	30.57	29.28	54.0	59.9	56.2	62.6	49.3	56.0	77	32	47	47	46	79	65	71	.352	.347	.338	5.43	1.57	.0	5.6	5.3	4.0	5.2		
November	30.03	30.59	29.36	43.2	51.2	47.9	53.6	40.3	47.0	68	26	35	36	37	73	58	67	.219	.226	.240	5.07	3.45	.0	4.5	5.3	4.0	5.2		
December	30.08	30.53	29.33	33.6	40.3	38.3	43.7	30.8	37.2	58	16	26	28	27	73	61	63	.152	.162	.155	1.28	.52	.5	6.3	6.3	5.3	6.3		
Year	29.98	30.72	29.28	52.2	57.6	54.8	60.9	48.2	54.6	97	16	45	46	46	77	67	73	.357	.366	.366	42.39	3.45	7.6	5.6	6.1	5.7	6.1		

AUGUSTA, GA.

[$\phi=33^{\circ}28'$ N.; $\lambda=81^{\circ}54'$ W.]

January.....	30.00	30.29	29.65	55.0	60.1	57.8	64.6	51.2	57.9	79	36	52	52	52	90	78	82	0.409	0.419	0.406	4.22	1.46	0.0	8.1	8.7	7.8	8.6
February.....	29.86	30.31	29.32	43.3	53.3	52.5	58.9	40.2	49.6	78	27	36	35	36	75	54	53	.230	.232	.229	3.71	1.65	.0	5.4	6.1	3.4	6.0
March.....	29.81	30.28	29.51	45.3	60.7	60.5	66.8	44.0	55.4	78	30	39	38	40	80	45	48	.257	.242	.257	2.42	1.03	.0	4.5	4.2	3.7	4.8
April.....	29.78	30.24	29.43	55.3	69.5	67.9	74.5	51.7	63.1	89	36	49	46	48	81	48	53	.367	.342	.365	7.75	2.96	.0	3.2	3.9	3.7	4.5
May.....	29.80	30.05	29.61	66.1	80.2	78.3	84.5	62.0	73.2	95	52	57	54	56	74	43	48	.486	.441	.471	2.31	1.19	.0	3.7	2.7	3.0	3.8
June.....	29.76	29.97	29.43	75.6	86.9	81.8	90.9	71.0	81.0	98	67	68	66	68	79	52	64	.698	.650	.682	3.32	1.02	.0	4.5	6.4	7.7	5.8
July.....	29.81	30.01	29.59	74.8	86.5	82.1	90.9	71.4	81.2	99	62	69	68	70	84	55	68	.720	.689	.726	4.54	1.25	.0	6.3	5.8	6.9	6.1
August.....	29.86	30.09	29.70	74.8	85.6	80.5	89.8	71.7	80.8	95	65	71	70	71	89	60	74	.768	.724	.756	4.21	1.34	.0	5.4	6.0	6.4	6.0
September.....	29.84	30.16	29.50	66.6	80.4	75.3	83.6	64.5	74.0	92	54	62	60	63	85	52	67	.573	.541	.595	8.9	.79	.0	5.4	5.4	5.0	5.1
October.....	29.84	30.26	29.42	55.1	69.7	64.7	73.4	53.0	63.2	91	34	49	49	52	80	65	65	.388	.393	.426	2.69	.97	.0	4.7	5.1	4.0	4.8
November.....	29.92	30.49	29.42	43.6	59.2	54.7	62.8	41.3	52.0	77	21	39	38	40	83	48	59	.259	.258	.272	1.66	.59	.0	4.0	4.0	3.4	4.3
December.....	29.98	30.33	29.56	38.6	52.5	49.8	56.7	36.0	46.4	71	15	33	34	36	81	50	61	.203	.215	.235	1.99	1.43	T	4.9	4.9	3.8	4.8
Year.....	29.86	30.49	29.32	57.8	70.4	67.2	74.8	54.8	64.8	99	15	52	51	53	82	53	62	.446	.429	.452	39.71	2.96	T	5.0	5.3	4.9	5.4

AUSTIN, TEX.

[$\phi=30^{\circ}16'$ N.; $\lambda=97^{\circ}44'$ W.]

January.....	29.40	29.84	28.99	44.2	50.1	49.6	55.3	39.8	47.6	78	25	42	43	44	90	79	81	0.287	0.308	0.314	2.43	0.69	0.0	8.4	8.8	8.5	8.7
February.....	29.43	29.91	28.89	46.3	58.7	60.4	64.3	43.2	53.8	82	29	38	39	38	74	50	47	.251	.259	.248	.12	.07	.0	4.9	5.7	4.8	5.1
March.....	29.41	29.78	28.91	48.7	59.1	62.2	65.3	46.1	55.7	84	29	43	43	43	80	60	54	.301	.308	.308	3.64	1.25	.0	6.5	6.3	6.0	5.6
April.....	29.27	29.68	28.88	58.6	75.2	77.1	79.8	57.5	68.6	95	37	53	52	50	82	47	43	.431	.419	.396	6.63	.62	.0	6.3	5.0	3.8	4.5
May.....	29.30	29.57	29.03	66.2	83.4	84.1	87.6	65.3	76.4	94	55	62	59	56	86	45	41	.562	.514	.466	3.67	2.52	.0	5.9	4.3	3.9	3.9
June.....	29.29	29.49	28.95	73.9	86.9	88.8	91.3	72.6	82.0	99	64	70	67	67	88	54	51	.734	.672	.672	3.92	1.63	.0	5.2	4.9	3.2	3.9
July.....	29.34	29.51	29.20	75.0	89.8	90.5	94.6	74.8	84.7	100	69	70	66	66	86	47	46	.747	.644	.635	.69	.38	.0	3.3	3.5	4.3	3.4
August.....	29.32	29.53	29.12	75.7	91.9	92.9	96.7	75.3	86.0	102	70	71	67	65	85	44	42	.758	.655	.620	4.26	3.02	.0	3.8	3.0	3.1	3.3
September.....	29.35	29.59	29.20	70.0	87.0	85.6	91.2	69.0	80.1	97	55	64	61	60	80	43	44	.610	.546	.538	2.21	2.21	.0	3.3	2.8	4.2	3.0
October.....	29.36	29.68	28.95	59.8	78.0	76.6	82.4	58.5	70.4	95	42	54	54	53	83	46	48	.447	.437	.428	4.70	2.67	.0	3.0	2.6	2.1	2.6
November.....	29.46	29.94	29.01	48.5	61.4	61.0	66.1	45.6	55.8	82	28	44	46	47	85	60	60	.324	.356	.352	3.62	2.60	9.7	3.9	4.3	2.8	4.0
December.....	29.47	29.81	29.03	47.6	53.9	53.6	58.0	45.0	51.5	72	25	45	45	47	90	74	78	.326	.334	.349	5.21	1.89	.0	7.2	7.5	7.9	7.7
Year.....	29.37	29.94	28.88	59.5	73.0	73.5	77.7	57.7	67.7	102	25	55	54	53	84	54	53	.482	.454	.444	35.10	3.02	9.7	5.1	4.9	4.6	4.6

BAKER, OREG.

[$\phi=44^{\circ}46'$ N.; $\lambda=117^{\circ}50'$ W.]

January.....	26.40	26.80	25.93	6.5	16.8	15.4	19.5	-0.8	9.4	36	-22	3	11	10	85	75	79	0.053	0.073	0.070	1.32	0.28	26.1	6.4	7.4	7.2	7.2
February.....	26.39	26.74	25.89	22.6	32.0	32.5	35.3	17.2	26.2	45	3	18	23	24	81	69	69	.098	.124	.126	.88	.16	18.5	6.6	8.9	8.1	8.7
March.....	26.40	26.86	25.89	33.1	45.3	46.1	49.4	29.7	39.6	56	21	29	31	30	82	58	56	.156	.175	.169	1.23	.29	3.1	5.6	7.7	6.9	7.1
April.....	26.42	26.72	25.91	35.8	49.0	51.0	53.8	32.7	43.2	72	25	28	29	29	74	49	44	.154	.160	.157	.70	.26	2.1	7.2	8.1	7.3	7.5
May.....	26.43	26.78	26.05	41.7	65.2	66.8	70.3	38.8	54.6	83	29	32	34	33	67	32	30	.178	.195	.191	.01	.01	.0	5.6	3.9	4.7	4.6
June.....	26.45	26.66	26.16	47.5	67.3	70.0	72.6	45.1	58.8	95	34	39	40	40	74	40	39	.248	.262	.265	.99	.34	.0	5.9	6.3	5.9	5.9
July.....	26.47	26.69	26.13	54.7	79.2	83.5	85.8	52.9	69.4	99	40	42	46	44	64	32	28	.277	.311	.302	.27	.33	.0	1.9	1.9	2.4	2.2
August.....	26.48	26.74	26.18	49.4	74.7	79.8	82.4	47.4	64.9	94	35	37	42	41	62	32	26	.224	.270	.264	.11	.08	.0	1.4	1.9	2.4	1.9
September.....	26.48	26.86	26.13	46.7	71.2	75.2	77.6	42.8	60.2	95	30	35	42	39	65	37	29	.209	.281	.284	.16	.09	.0	2.0	3.5	3.5	3.1
October.....	26.52	26.84	26.24	41.7	60.3	61.1	65.9	38.3	52.1	79	31	36	40	40	81	49	50	.215	.249	.256	1.30	.58	.0	3.9	4.5	4.7	4.3
November.....	26.47	26.78	26.03	36.7	45.8	44.6	49.1	33.7	41.4	61	23	31	33	34	81	63	67	.175	.192	.194	1.79	.83	T	6.3	7.6	8.5	8.0
December.....	26.50	26.96	25.94	32.0	38.5	36.7	41.2	28.2	34.7	51	13	27	29	28	82	67	72	.148	.159	.158	1.34	.77	2.4	7.2	8.0	8.3	8.3
Year.....	26.45	26.96	25.89	37.4	53.8	55.2	58.6	33.8	46.2	99	-22	30	33	33	75	50	49	.178	.204	.200	10.10	.83	52.2	5.0	5.8	5.8	5.7

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

ATLANTIC CITY, N. J.

[H=7 ft.; H_b=52 ft.; h_i=37 ft.; h_r=33 ft.; h_a=172 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temp.		32° temperature or below	Elec- tricity			
																	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below			90° or above		
	Average hourly ve- locity	Prevalling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm															
January	17.2	N.	42	NE.	9	10	7	7	4	6	12	8	8	0	0	4	27	18	15	0	0	0	16	10	0	0	4	0	0
February	17.1	W.	47	NE.	10	3	2	2	4	4	8	15	18	0	4	8	16	12	10	5	1	1	1	1	0	0	16	0	0
March	16.7	W.	40	W.	8	6	8	4	2	3	6	24	9	0	10	8	13	9	8	5	1	0	6	2	0	0	14	2	0
April	19.0	E.	57	E.	11	4	7	11	4	11	4	10	9	0	6	9	15	13	11	0	0	0	5	1	0	0	0	2	0
May	14.9	S.	33	NW.	3	8	2	5	2	16	13	9	7	0	9	15	7	9	7	0	0	0	6	1	0	0	0	5	0
June	14.3	S.	36	NE.	3	3	7	7	3	15	10	5	10	0	2	13	15	15	12	0	0	0	8	1	0	0	0	9	0
July	13.0	S.	36	SE.	1	5	6	7	7	12	8	10	7	0	10	14	7	8	6	0	0	0	2	0	0	5	0	2	0
August	13.3	S.	31	S.	0	10	4	6	5	20	9	5	3	0	10	12	9	14	12	0	0	0	12	8	0	1	0	6	0
September	13.9	W.	38	NE.	3	12	8	5	0	9	9	12	5	0	14	8	8	4	3	0	0	0	0	0	0	0	0	2	0
October	16.8	W.	46	SE.	9	7	3	6	9	6	9	12	10	0	8	10	13	12	12	0	0	0	2	1	0	0	0	1	0
November	16.4	W.	56	NE.	6	4	2	3	3	8	10	26	4	0	12	8	10	10	6	0	0	0	3	1	0	0	5	1	0
December	14.1	W.	36	W.	2	11	0	4	2	3	5	22	15	0	9	8	14	9	5	5	2	0	3	2	1	0	15	0	0
Year	15.5	W.	57	E.	65	83	56	67	45	113	103	158	105	0	94	117	154	133	107	17	6	0	68	28	2	6	54	30	0

AUGUSTA, GA.

[H=134 ft.; H_b=182 ft.; h_i=62 ft.; h_r=54 ft.; h_a=77 ft.]

January	6.3	NE.	21	SW.	0	6	20	4	4	7	5	3	12	1	1	6	24	22	13	0	0	0	9	7	0	0	0	0	0
February	7.2	NW.	24	NW.	0	3	6	6	5	9	3	5	17	2	8	8	12	10	10	0	0	0	1	0	0	0	4	1	0
March	6.2	NW.	19	W.	0	4	4	1	5	9	3	8	21	7	13	6	12	9	9	0	0	0	1	1	0	0	3	1	0
April	6.2	NW.	20	SW.	0	2	6	8	6	9	6	9	11	3	14	7	9	11	10	0	0	0	2	1	0	0	0	7	0
May	5.7	NW.	20	N.	0	2	7	8	7	10	4	3	17	4	15	14	2	7	5	0	0	0	0	0	0	7	0	4	0
June	5.9	S.	24	NW.	0	9	4	2	5	18	9	5	7	1	3	22	5	16	10	0	0	0	0	0	18	0	17	0	0
July	5.5	S.	20	W.	0	4	3	3	8	17	14	4	9	0	3	18	10	13	9	0	0	0	1	0	0	19	0	15	0
August	5.1	S.	19	NE.	0	2	10	10	9	21	2	0	7	1	7	12	12	16	12	0	0	0	1	0	0	15	0	14	0
September	5.5	NE.	16	SE.	0	8	19	4	6	8	3	4	5	3	12	8	10	2	2	0	0	0	4	2	0	6	0	3	0
October	6.7	NE.	26	NW.	0	7	21	0	7	6	0	4	14	3	12	8	11	10	9	0	0	0	5	1	0	1	0	1	0
November	6.0	NW.	18	NE.	0	9	14	1	1	4	0	3	22	6	15	5	10	10	6	0	0	0	4	2	0	0	6	0	0
December	5.4	NW.	18	NW.	0	14	6	3	3	6	3	6	18	3	13	9	9	5	5	1	0	0	3	2	0	0	9	0	0
Year	6.0	NW.	26	NW.	0	70	120	50	66	124	52	54	160	34	116	123	126	131	100	1	0	0	31	16	0	66	22	63	0

AUSTIN, TEX.

[H=531 ft.; H_b=605 ft.; h_i=68 ft.; h_r=60 ft.; h_a=90 ft.]

January	7.6	N.	27	S.	0	20	13	9	4	8	3	0	4	1	1	7	23	22	14	0	0	0	14	7	3	0	8	1	0
February	9.1	S.	32	NW.	1	14	13	2	2	14	4	1	5	1	10	8	10	3	2	0	0	0	2	0	0	0	3	0	0
March	9.2	S.	31	NW.	0	17	7	4	8	13	0	5	8	0	8	14	9	9	0	0	0	1	7	1	0	0	2	6	0
April	9.6	S.	30	S.	0	8	3	3	9	24	4	2	4	3	11	13	6	2	1	0	0	0	2	0	0	2	0	1	0
May	9.1	S.	23	NE.	0	5	2	3	16	26	2	0	7	1	17	8	6	4	4	0	0	0	3	0	0	7	0	4	0
June	7.9	S.	27	N.	0	2	2	5	15	23	4	3	1	5	17	10	3	7	7	0	0	0	5	0	0	22	0	8	0
July	8.1	S.	24	S.	0	2	0	1	16	32	6	1	1	3	18	11	2	4	3	0	0	0	4	0	0	28	0	2	0
August	7.2	S.	22	S.	0	1	3	0	17	29	4	2	2	4	19	10	2	3	3	0	0	0	0	0	0	30	0	6	0
September	5.9	S.	20	N.	0	4	5	8	8	18	2	1	3	11	17	10	3	2	2	0	0	0	2	1	0	20	0	4	0
October	7.5	S.	24	NW.	0	11	8	4	10	15	3	0	9	2	20	7	4	5	5	0	0	0	9	0	0	5	0	3	0
November	8.0	S.	27	N.	0	19	5	4	4	15	1	2	9	1	14	13	3	5	4	2	2	0	6	0	0	8	1	0	0
December	7.5	N.	24	N.	0	15	11	12	7	6	1	1	9	0	6	2	23	13	9	0	0	0	17	8	0	0	5	0	0
Year	8.0	S.	32	NW.	1	118	72	55	116	223	34	18	62	32	158	113	94	79	63	2	2	1	71	17	3	114	26	36	0

BAKER, OREG.

[H=3,445 ft.; H_b=3,471 ft.; h_i=36 ft.; h_r=41 ft.; h_a=54 ft.]

January	6.4	SE.	19	SW.	0	13	2	1	31	3	0	9	3	0	7	4	20	17	10	25	17	0	0	0	30	0	31	0	0
February	7.0	SE.	26	SW.	0	4	0	2	24	10	4	10	2	0	1	5	22	15	7	21	15	1	1	0	9	0	28	0	0
March	6.3	SE.	19	SW.	0	8	1	4	26	13	2	4	3	1	4	10	17	11	8	9	6	1	2	1	0	0	22	0	0
April	7.2	SE.	23	S.	0	11	3	0	24	10	2	4	6	0	4	7	19	12	6	9	3	1	0	0	0	0	15	0	0
May	7.8	N.	28	N.	0	20	6	0	20	8	4	2	2	0	14	7	10	1	0	0	0	0	0	0	0	0	3	0	0
June	6.2	N.	26	SW.	0	19	6	3	11	13	3	2	2	1	10	5	15	7	5	0	0	2	1	1	0	1	0	4	0
July	6.3	N.	26	SW.	0	21	2	0	10	22	2	1	4	0	22	7	2	3	2	0	0	0	0	0	0	10	0	5	0
August	5.9	N.	21	S.	0	21	4	3	14	14	0	2	4	0	23	7	1	3	1	0	0	0	0	0	0	5	0	1	0
September	5.8	S.	22	S.	0	11	3	3	10	19	2	9	3	0	19	6	5	5	1	0	0	0	1	0	0	5	3	4	0
October	5.8	SE.	19	S.	0	6	2	1	20	13	2	13	5	0	13	7	11	7	5	0	0	1	1	0	0	0	5	0	0
November	6.4	SE.	20	S.	0	6	0	2	22	17	4	7	2	0	4	3	23	13	8	3	0	0	0	0	0	0	12	0	0
December	6.2	S.	23	SW.	0	4	6	3	15	21	6	4	3	0	2	8	21	11	6	9	5	0	3	2	5	0	21	0	0
Year	6.5	SE.	28	N.	0	144	35	22	227	163	31	67	39	2	123	76	166	105	59	76	46	6	9	4	44	21	140	14	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

BALTIMORE, MD.

[$\phi=39^{\circ}17' N.$; $\lambda=76^{\circ}37' W.$]

Month	Pressure			Temperature								Moisture															
	Extremes			Mean				Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation		Cloudiness									
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	
January	30.13	30.65	29.55	41.2	44.6	44.4	50.1	36.9	43.5	75	28	35	36	36	77	72	72	0.218	0.226	0.221	6.74	1.25	0.0	8.2	8.8	8.0	8.5
February	29.89	30.31	29.26	32.9	39.0	38.8	44.0	29.4	36.7	60	20	23	24	25	66	55	58	.130	.136	.144	3.52	1.43	8.5	5.9	6.5	4.5	6.0
March	29.84	30.32	29.34	36.2	44.7	44.4	49.6	34.2	41.9	67	23	25	25	28	63	47	53	.137	.137	.156	1.93	.90	14.3	5.3	5.2	3.4	4.6
April	29.86	30.34	29.38	48.4	57.2	55.3	61.3	45.1	53.2	84	34	37	36	38	67	49	56	.230	.225	.240	7.92	3.99	T	6.4	6.3	6.2	6.4
May	29.85	30.30	29.55	61.5	72.9	68.5	76.9	56.8	66.8	94	45	49	47	50	65	42	56	.370	.344	.392	3.27	1.00	.0	5.0	4.5	4.8	4.5
June	29.78	30.09	29.37	71.5	80.7	75.9	84.1	66.4	75.2	93	60	62	62	62	74	54	64	.566	.559	.564	3.53	.91	.0	6.4	7.3	6.1	6.1
July	29.85	30.07	29.59	74.3	83.0	80.6	86.5	70.1	78.3	97	59	64	63	65	72	53	60	.613	.588	.635	3.81	1.32	.0	5.1	5.6	5.4	5.2
August	29.93	30.20	29.65	74.0	82.5	78.9	86.4	70.5	78.4	96	62	67	67	68	80	61	72	.668	.664	.701	5.06	2.03	.0	4.9	5.1	5.5	5.5
September	29.95	30.42	29.50	62.1	72.6	69.4	76.1	58.3	67.2	96	47	54	52	55	75	50	61	.439	.413	.448	1.10	.70	.0	3.7	4.4	2.9	4.0
October	29.92	30.51	29.22	51.1	60.1	57.8	64.1	48.2	56.2	79	36	43	45	46	75	60	66	.302	.326	.334	7.75	2.68	.0	6.0	6.5	5.1	6.0
November	29.97	30.53	29.32	42.2	51.2	49.1	55.6	39.7	47.6	74	26	33	34	35	69	53	60	.200	.217	.220	5.21	4.19	T	4.6	5.6	4.0	4.7
December	30.02	30.46	29.42	33.8	40.9	38.9	44.4	31.5	38.0	69	20	23	21	24	62	46	55	.131	.127	.136	.95	.34	.8	6.4	6.0	5.1	5.6
Year	29.92	30.65	29.22	52.4	60.8	58.5	64.9	48.9	56.9	97	20	43	43	44	70	54	61	.334	.330	.349	50.79	4.19	23.6	5.7	6.0	5.1	5.6

BINGHAMTON, N. Y.

[$\phi=42^{\circ}6' N.$; $\lambda=75^{\circ}55' W.$]

January	29.27	29.87	28.58	32.1	36.5	-----	41.1	25.5	33.3	63	6	27	29	-----	84	72	-----	0.155	0.166	-----	4.13	0.94	6.9	7.9	8.4	-----	8.1
February	29.03	29.52	28.46	24.2	32.4	-----	36.9	20.0	28.4	59	7	21	21	-----	86	63	-----	.116	.117	-----	2.72	1.92	9.7	7.8	7.2	-----	7.6
March	28.99	29.52	28.57	25.5	33.1	-----	36.2	21.9	29.0	54	6	21	21	-----	81	61	-----	.110	.115	-----	2.50	.60	14.1	6.4	7.4	-----	7.2
April	29.05	29.53	28.56	40.9	49.3	-----	53.7	36.3	45.0	71	27	34	34	-----	77	57	-----	.200	.199	-----	3.58	.97	.7	8.3	8.2	-----	7.8
May	29.05	29.47	28.73	53.3	66.7	-----	71.3	47.1	59.2	89	34	47	46	-----	79	52	-----	.330	.329	-----	3.02	.81	.0	6.3	7.0	-----	6.5
June	28.97	29.34	28.62	63.0	74.2	-----	78.6	56.9	67.8	93	49	58	57	-----	84	58	-----	.486	.483	-----	5.55	1.57	.0	7.2	7.4	-----	7.3
July	29.07	29.24	28.74	65.6	79.6	-----	83.5	60.7	72.1	95	49	60	60	-----	84	52	-----	.532	.525	-----	1.33	.56	.0	4.9	7.1	-----	6.7
August	29.16	29.42	28.84	66.6	80.6	-----	84.9	63.0	74.0	94	51	63	64	-----	90	58	-----	.590	.593	-----	2.70	1.38	.0	5.8	7.0	-----	7.1
September	29.16	29.67	28.66	52.3	67.8	-----	71.4	49.2	60.3	93	34	50	49	-----	92	53	-----	.374	.375	-----	2.84	1.38	.0	4.7	5.6	-----	5.4
October	29.09	29.70	28.38	45.0	54.2	-----	57.8	40.5	49.2	81	21	41	40	-----	85	59	-----	.270	.263	-----	5.89	3.54	T	7.3	8.0	-----	7.9
November	29.12	29.66	28.61	36.1	44.3	-----	48.2	32.5	40.4	69	20	30	31	-----	80	60	-----	.175	.182	-----	1.87	1.14	3.6	7.9	7.8	-----	8.0
December	29.15	29.64	28.49	25.5	31.8	-----	34.7	23.0	28.8	49	5	22	22	-----	86	64	-----	.123	.120	-----	2.00	.76	4.1	7.4	7.9	-----	7.8
Year	29.09	29.87	28.38	44.2	54.2	-----	58.2	39.7	49.0	95	5	40	40	-----	84	59	-----	.288	.289	-----	38.13	3.54	39.1	6.8	7.4	-----	7.3

BIRMINGHAM, ALA.

[$\phi=33^{\circ}32' N.$; $\lambda=86^{\circ}50' W.$]

January	29.36	29.57	29.06	53.1	58.1	57.2	63.4	49.4	56.4	78	31	50	50	51	90	78	81	0.384	0.390	0.393	13.37	3.92	0.0	8.7	8.9	8.2	9.0
February	29.31	29.75	28.90	41.0	50.1	48.8	55.8	36.9	46.4	80	23	32	33	34	72	53	57	.204	.206	.212	4.08	1.75	.0	6.1	5.5	5.4	5.6
March	29.28	29.64	28.86	44.2	58.3	55.8	63.0	41.0	52.0	77	26	36	36	36	74	45	50	.232	.225	.232	3.70	1.66	.0	5.5	3.8	4.2	4.5
April	29.20	29.68	28.93	54.6	68.9	67.1	73.8	51.5	62.6	86	36	47	46	45	74	48	48	.344	.344	.329	6.01	1.79	.0	4.2	4.4	3.3	4.0
May	29.23	29.38	29.07	65.6	79.3	76.2	82.8	62.2	72.5	94	48	59	59	59	80	52	57	.503	.508	.508	5.27	2.50	.0	3.5	5.8	3.6	4.4
June	29.21	29.42	28.92	73.0	87.8	83.3	91.1	69.7	80.4	100	63	67	66	65	82	49	57	.666	.635	.626	1.77	1.15	.0	3.4	5.3	5.2	4.7
July	29.27	29.47	29.12	72.2	86.2	82.7	90.2	69.2	79.7	96	58	67	66	66	83	52	58	.660	.650	.637	4.11	1.54	.0	3.3	5.6	4.7	4.8
August	29.27	29.50	29.13	73.7	86.8	81.3	90.6	71.3	81.0	97	68	70	70	69	88	58	69	.730	.723	.720	5.27	1.32	.0	3.9	7.6	5.6	5.6
September	29.28	29.56	29.03	65.1	79.9	74.5	83.2	63.4	73.3	89	50	61	62	62	87	56	66	.562	.575	.572	2.81	1.42	.0	4.5	5.0	3.9	4.3
October	29.27	29.56	28.96	54.8	68.0	62.8	71.0	51.9	61.4	89	30	50	51	52	84	58	68	.391	.411	.414	6.60	2.63	.0	4.9	5.6	4.2	5.1
November	29.35	29.85	28.92	44.2	55.8	52.0	59.3	41.2	50.2	78	22	37	38	37	75	54	60	.243	.257	.249	1.71	.79	T	5.9	5.3	3.8	5.4
December	29.42	29.70	28.86	40.0	50.4	47.9	53.7	37.4	45.6	72	12	34	36	36	80	58	63	.221	.239	.237	2.04	.71	1.5	6.2	5.8	6.0	6.2
Year	29.29	29.85	28.86	56.8	69.1	65.8	73.2	53.8	63.5	100	12	51	51	51	81	55	61	.428	.430	.427	56.69	3.92	1.5	5.0	5.7	4.8	5.3

BISMARCK, N. DAK.

[$\phi=46^{\circ}48' N.$; $\lambda=100^{\circ}48' W.$]

January	28.25	28.71	27.34	-9.1	-3.2	-3.3	3.1	-15.1	-6.0	34	-37	-14	-10	-10	76	68	71	0.021	0.025	0.026	0.70	0.31	13.8	4.4	5.8	5.7	5.5
February	28.15	28.72	27.65	3.6	13.5	14.5	18.8	-1.5	8.6	40	-27	0	6	8	82	68	73	.046	.061	.069	.39	.34	5.8	4.8	4.1	4.1	4.4
March	28.33	28.73	27.78	22.9	31.7	33.9	37.1	20.0	28.6	66	4	19	21	22	84	62	62	.104	.113	.121	.58	.41	7.1	6.5	6.3	5.2	5.7
April	28.12	28.54	27.63	34.9	48.2	49.3	52.7	33.0	42.8	73	15	30	31	31	83	54	52	.171	.176	.174	1.43	.88	12.4	6.7	6.4	6.8	6.4
May	28.16	28.68	27.61	49.3	64.7	67.4	71.0	46.8	58.9	94	28	40	40	38	73	44	38	.257	.256	.238	1.52	1.35	.0	5.2	5.7	5.3	5.1
June	28.14	28.40	27.64	55.4	71.1	73.6	76.1	53.2	64.6	99	36	49	50	51	80	50	48	.364	.374	.394	6.09	3.09	.0	5.6	5.3	5.1	5.2
July	28.16	28.46	27.85	64.4	79.4	82.1	84.9	62.2	73.6	100	50	57	57	57	79	49	46	.474	.476	.473	2.17	.61	.0	6.2	4.7	4.2	4.7
August	28.13	28.41	27.82	64.5	83.0	85.9	88.9	62.0	75.4	104	52	52	50	50	67	34	31	.404	.377	.372	1.12	.43	.0	5.5	3.4	4.0	4.2
September	28.22	28.58	27.82	50.4	66.3	68.0	72.8	47.9	60.4	94	32	43	45	44	77	48	46	.296	.316	.308	1.19	1.04	.0	4.6	5.0	4.7	4.5
October	28.22	28.76	27.64	38.9	52.7	50.8	57.2	35.2	46.2	86	15	32	34	32	77	52	52	.187	.205	.192	.49	.40	T	5.6	5.4	5.1	5.2
November	28.24	28.74	27.52	23.2	32.1	29.8	35.7	17.9	26.8	65	-5	17	20	20	75	63	69	.098	.115	.111	.41	.18	4.6	5.0	6.9	6.1	6.3
December	28.25	28.80	27.76	10.0	17.2	15.7	24.4	2.9	13.6	43	-18	6	11	11	84	74	80	.064	.076	.078	.51	.20	5.9	6.0	7.1	5.1	6.3
Year	28.20	28.80	27.34	24.0	46.4	47.3	51.9	30.4	41.1	104	-37	28	30	30	78	56	56	.207	.214	.213	16.60	3.09	49.6	5.5	5.5	5.1	5.3

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

BALTIMORE, MD.

[H=14 ft.; H_b=123 ft.; h_t=100 ft.; h_r=90 ft.; h_a=215 ft.]

Month	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m. and 7:30 p. m., winds observed from											Precipitation	Snow		Fog	Maximum temp.	32° temperature or below	Elec- tricity							
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum	Thunderstorm	Aurora	
	Mi.		Mi.																											
January	10.4	NE.	30	SW.	0	9	20	4	4	3	13	1	8	0	3	2	26	17	16	0	0	0	19	2	0	0	6	0	0	
February	11.8	NW.	38	SW.	2	9	8	2	3	10	7	4	13	0	9	6	13	11	9	9	6	0	6	4	1	0	21	0	0	
March	11.6	SW.	36	SW.	2	3	11	3	3	7	18	2	15	0	14	9	8	8	7	8	4	1	5	0	0	12	2	0	0	
April	13.5	NE.	43	NE.	6	6	12	8	6	3	13	0	12	0	6	10	14	13	10	2	0	1	9	1	0	0	8	0	0	
May	9.9	SW.	40	NW.	3	6	8	1	4	18	13	2	10	0	14	9	8	13	8	0	0	2	5	0	0	1	0	2	0	
June	9.9	SW.	43	NW.	1	7	11	7	1	6	20	1	7	0	6	13	11	11	10	0	0	9	0	0	5	5	0	7	0	
July	9.3	SW.	37	NE.	1	6	6	5	4	12	16	4	9	0	7	17	7	11	9	0	0	5	0	0	12	0	7	0	0	
August	8.7	S.	46	NW.	1	8	13	4	6	16	11	2	2	0	11	8	12	10	10	0	0	10	1	0	10	0	9	0	0	
September	8.7	SW.	26	SW.	0	11	10	4	1	12	9	3	10	0	16	5	9	6	4	0	0	5	0	0	3	0	1	0	0	
October	10.9	SW.	38	SE.	4	11	6	6	5	10	14	2	8	0	8	11	12	13	13	0	0	15	3	0	0	0	0	0	0	
November	10.6	SW.	35	NE.	2	3	7	1	2	9	22	6	10	0	14	7	9	7	5	1	0	0	8	1	0	0	6	0	0	
December	9.9	SW.	35	W.	1	11	10	1	6	3	18	1	12	0	8	10	13	7	7	4	1	0	12	2	1	0	15	0	0	
Year	10.4	SW.	46	NW.	23	90	122	46	45	109	174	28	116	0	116	107	142	127	108	24	11	4	108	14	2	31	60	36	0	

BINGHAMTON, N. Y.

[H=858 ft.; H_b=870 ft.; h_t=57 ft.; h_r=49 ft.; h_a=79 ft.]

January	6.7	NW.	24	SE.	0	6	5	3	5	0	5	2	5	0	3	8	20	16	15	11	7	0	17	0
February	7.4	NW.	28	SE.	0	3	6	5	1	3	1	5	4	0	4	6	18	11	10	13	8	0	13	0
March	8.1	NW.	26	SW.	0	2	6	4	0	0	3	3	13	0	8	1	22	17	13	20	14	1	8	0
April	7.9	NW.	24	SE.	0	0	6	3	7	0	4	4	6	0	4	6	20	19	12	5	3	1	9	0
May	6.0	NW.	24	SW.	0	0	11	6	1	0	2	4	7	0	8	7	16	16	11	0	0	1	19	3
June	5.3	NE.	21	NE.	0	0	9	4	8	2	5	5	1	1	2	12	16	14	11	0	0	0	19	4
July	5.3	E.	18	SW.	0	2	7	12	1	0	2	2	5	0	6	10	15	10	7	0	0	0	18	6
August	4.9	NE.	18	NW.	0	3	9	12	1	1	0	3	2	0	4	10	17	12	9	0	0	0	20	7
September	5.5	E.	28	SW.	0	0	10	8	1	1	1	3	6	0	10	11	9	10	8	0	0	0	18	12
October	6.9	NW.	21	W.	0	1	8	5	2	2	1	8	4	0	2	7	22	18	11	5	1	0	13	1
November	6.8	W.	30	SW.	0	1	2	6	3	0	4	7	6	1	2	9	19	15	10	8	3	0	16	1
December	6.6	NW.	22	NW.	0	0	7	5	1	2	3	6	7	0	5	6	20	10	8	19	6	0	10	0
Year	6.4	NW.	30	SW.	0	18	86	73	25	11	28	52	70	2	58	93	214	168	125	81	42	3	180	34

BIRMINGHAM, ALA.

[H=694 ft.; H_b=700 ft.; h_t=11 ft.; h_r=3 ft.; h_a=48 ft.]

January	9.2	SE.	25	S.	0	12	2	11	16	10	3	1	7	0	0	4	27	20	18	0	0	0	3	1
February	9.0	NW.	28	S.	0	15	1	4	7	10	2	5	12	0	9	7	12	10	9	0	0	0	1	0
March	7.8	N.	23	W.	0	25	0	4	3	8	6	8	8	0	12	15	4	7	6	0	0	0	1	0
April	8.2	S.	38	SE.	1	8	1	5	5	17	6	5	12	1	14	7	9	11	10	0	0	1	1	0
May	5.8	S.	30	S.	0	10	3	8	11	8	6	6	9	1	14	13	4	10	8	0	0	0	0	0
June	5.7	S.	21	SE.	0	12	3	1	0	19	10	3	11	1	9	16	5	7	5	0	0	0	1	1
July	5.6	S.	26	S.	0	8	5	4	5	10	14	4	9	3	12	14	5	10	9	0	0	0	0	0
August	5.6	SE.	18	SE.	0	1	5	11	17	15	5	4	1	3	9	12	10	15	12	0	0	0	1	0
September	6.0	E.	20	SE.	0	8	11	14	7	7	0	2	11	0	14	8	8	7	5	0	0	0	4	0
October	7.3	E.	28	SE.	0	10	5	13	2	11	6	2	13	0	12	9	10	12	12	0	0	1	0	0
November	7.6	N.	21	SE.	0	17	5	13	2	7	1	6	9	0	12	6	12	9	7	2	0	0	2	0
December	7.0	S.	27	SE.	0	16	4	12	9	10	3	1	7	0	10	4	17	12	8	2	1	0	1	0
Year	7.1	S.	38	SE.	1	142	45	100	84	132	62	47	109	9	127	115	123	130	109	4	1	2	15	2

BISMARCK, N. DAK.

[H=1,670 ft.; H_b=1,674 ft.; h_t=8 ft.; h_r=3 ft.; h_a=57 ft.]

January	7.7	NW.	30	N.	0	4	10	6	4	1	4	9	23	1	10	10	11	10	5	19	10	0	0	0
February	9.3	NW.	36	NW.	1	3	6	6	8	3	3	5	21	1	13	10	5	4	3	15	4	0	0	0
March	8.7	NE.	30	NE.	0	6	12	5	11	3	4	6	14	1	8	14	9	4	4	17	4	0	1	0
April	11.7	NW.	35	NW.	2	7	6	11	9	3	2	4	18	0	6	12	12	5	5	4	2	0	0	0
May	11.1	NW.	31	NW.	0	7	9	6	13	2	1	8	15	1	9	14	8	8	2	0	0	0	1	0
June	9.9	SE.	37	NW.	3	8	8	7	8	5	6	10	7	1	10	12	8	9	7	0	0	0	0	0
July	8.3	NW.	30	NW.	0	15	10	10	8	5	1	3	10	0	11	14	6	9	8	0	0	0	4	1
August	8.8	SE.	38	SW.	1	10	9	6	12	4	2	9	9	0	14	11	6	4	4	0	0	1	0	0
September	8.4	NE.	30	NW.	0	5	11	11	7	2	3	10	9	2	12	11	7	6	3	0	0	0	3	0
October	9.4	NW.	30	NW.	0	10	2	6	13	1	2	10	15	3	11	12	8	3	3	1	0	0	3	0
November	9.4	NW.	34	NW.	1	3	8	3	6	2	2	10	25	1	10	5	15	6	4	14	5	0	1	0
December	9.3	NW.	36	W.	1	1	3	15	11	1	3	7	20	1	5	11	15	8	6	13	5	0	0	0
Year	9.3	NW.	38	SW.	9	79	94	92	110	32	33	91	186	13	119	136	110	76	54	83	30	1	13	1

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

BLOCK ISLAND, R. I.

[$\phi=41^{\circ}10' N.$; $\lambda=71^{\circ}36' W.$]

Month	Pressure			Temperature										Moisture															
	Extremes			Mean							Extremes			Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight		
	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	T	8.1	7.3	7.5	7.8	
January	30.22	30.82	29.50	38.0	40.5	40.0	44.6	34.4	39.5	54	24	34	36	36	84	84	86	0.201	0.220	0.219	4.51	1.21	3.1	8.1	7.3	7.5	7.8		
February	29.90	30.35	29.16	33.2	36.9	35.7	40.1	29.2	34.6	52	14	28	30	30	81	75	78	0.163	0.171	0.168	1.81	0.89	1.8	6.4	5.5	6.0	6.1		
March	29.83	30.38	29.24	33.0	37.3	36.4	40.4	30.0	35.2	51	19	27	30	30	77	75	77	0.148	0.169	0.165	3.55	1.43	6.4	5.5	5.8	5.7	6.0		
April	29.98	30.54	29.42	42.9	47.3	44.0	49.6	39.3	44.4	60	34	38	40	39	84	77	84	0.234	0.251	0.242	4.59	1.57	T	5.8	6.1	6.5	6.5		
May	29.93	30.35	29.65	54.0	59.1	53.9	62.0	49.2	55.6	72	42	50	53	50	87	82	89	0.365	0.410	0.371	3.26	1.68	0	4.6	4.3	5.5	6.0		
June	29.88	30.31	29.39	62.0	66.2	62.5	68.8	58.0	63.4	77	54	59	61	60	92	86	93	0.508	0.546	0.523	3.82	1.26	0	5.1	6.3	6.5	7.0		
July	29.94	30.15	29.59	69.0	73.0	68.3	75.7	63.7	69.7	88	58	65	66	65	88	80	91	0.628	0.645	0.628	1.22	0.76	0	5.4	5.5	5.9	5.3		
August	30.05	30.29	29.75	70.7	75.4	70.6	77.8	67.1	72.4	84	59	68	69	69	93	82	94	0.701	0.720	0.706	5.85	3.13	0	4.6	4.9	5.0	6.2		
September	30.02	30.53	29.46	61.9	65.4	62.2	68.2	57.6	62.9	79	51	57	58	56	84	77	82	0.482	0.496	0.474	3.54	1.45	0	3.9	4.3	4.4	4.7		
October	30.02	30.62	29.36	52.1	53.6	54.0	58.5	48.2	53.4	69	39	45	46	45	76	69	73	0.316	0.331	0.323	3.42	1.21	0	5.1	5.4	4.2	5.1		
November	30.01	30.53	29.32	44.5	48.1	47.0	51.1	40.4	45.8	61	28	37	39	38	76	71	72	0.234	0.247	0.247	4.44	2.06	T	4.7	4.6	4.1	4.7		
December	30.05	30.53	29.14	34.3	36.4	36.3	40.4	30.2	35.3	55	21	28	28	28	77	70	70	0.159	0.158	0.156	2.22	0.61	T	5.4	5.4	4.4	5.0		
Year	29.98	30.82	29.14	49.6	53.3	50.9	56.4	45.6	51.0	88	14	45	46	46	83	77	82	0.345	0.364	0.352	42.23	3.13	11.3	5.4	5.4	5.5	5.9		

BOISE, IDAHO

[$\phi=43^{\circ}37' N.$; $\lambda=116^{\circ}13' W.$]

January	27.18	27.58	26.72	12.0	19.1	20.7	23.7	7.0	15.4	37	-15	9	11	12	85	67	68	0.069	0.076	0.081	1.60	0.26	25.5	6.7	7.3	7.2	7.0
February	27.16	27.55	26.57	28.4	36.5	38.0	40.9	23.9	32.4	51	5	22	24	24	78	60	57	0.121	0.130	0.130	1.44	0.29	9.3	6.4	8.2	7.1	7.5
March	27.14	27.65	26.63	37.5	49.6	51.8	54.2	34.5	44.4	64	27	31	30	30	78	48	45	0.173	0.166	0.170	1.80	0.54	T	5.5	7.4	6.9	6.7
April	27.14	27.49	26.40	41.5	53.3	56.1	58.9	37.6	45.2	81	28	31	28	28	68	40	38	0.174	0.159	0.158	1.50	0.42	0	6.2	7.6	6.7	6.5
May	27.11	27.52	26.79	49.4	68.6	71.6	74.1	46.8	60.4	87	37	37	36	35	64	32	29	0.221	0.215	0.206	3.27	0.28	0	4.5	3.5	4.7	4.1
June	27.14	27.35	26.84	54.7	72.8	76.1	79.2	52.9	66.0	97	43	44	43	40	68	36	29	0.295	0.283	0.257	4.4	0.18	0	5.0	5.1	4.8	4.7
July	27.12	27.30	26.82	63.6	84.8	90.2	91.7	62.1	76.9	106	55	46	48	45	53	28	22	0.314	0.338	0.301	0.07	0.06	0	3.3	1.6	3.3	2.9
August	27.14	27.43	26.83	57.3	80.0	86.5	87.2	55.1	71.2	97	42	39	41	38	52	25	18	0.245	0.251	0.232	0.00	0.00	0	1.3	1.3	1.0	1.2
September	27.16	27.57	26.72	54.8	74.9	78.4	80.4	50.9	65.6	95	35	38	40	39	56	30	26	0.238	0.252	0.247	3.39	0.24	0	2.5	2.0	3.3	2.4
October	27.22	27.55	26.92	45.7	63.6	64.9	67.8	42.6	55.2	78	32	37	39	40	73	42	42	0.224	0.240	0.249	1.18	0.88	0	2.4	3.4	3.3	3.3
November	27.22	27.51	26.81	42.0	50.1	50.2	53.5	37.9	45.7	67	25	33	34	35	74	55	58	0.192	0.194	0.205	1.71	0.54	T	5.8	7.4	7.5	7.2
December	27.27	27.72	26.74	34.0	40.9	40.8	44.3	30.7	37.5	59	22	29	30	31	82	66	68	0.160	0.171	0.175	2.10	0.73	1	6.3	7.0	7.3	6.1
Year	27.17	27.72	26.40	43.4	57.8	60.4	63.0	40.2	51.6	106	-15	33	34	33	69	44	42	0.202	0.207	0.201	12.60	0.88	35.5	4.7	5.2	5.3	5.0

BOSTON, MASS.¹[$\phi=42^{\circ}22' N.$; $\lambda=71^{\circ}2' W.$]

January	30.22	30.84	29.54	34.3	39.1	38.1	45.3	29.5	37.4	64	15	26	29	29	72	68	70	0.161	0.178	0.168	3.93	0.87	2.0	7.6	7.6	6.5	7.3
February	29.90	30.35	29.08	29.3	36.4	34.3	39.9	26.6	33.2	56	10	21	23	24	71	58	64	0.119	0.129	0.134	1.31	0.63	T	5.9	5.3	6.4	5.8
March	29.81	30.35	29.17	29.9	37.8	35.4	41.7	26.5	34.1	57	15	20	21	22	64	51	58	0.113	0.114	0.120	3.57	2.21	1.9	4.5	6.2	5.4	5.6
April	29.98	30.55	29.47	42.9	48.8	45.1	52.2	38.3	45.2	71	31	34	34	35	70	61	69	0.199	0.205	0.206	5.34	2.02	T	6.3	7.0	6.0	6.8
May	29.91	30.35	29.62	56.7	64.1	59.5	68.1	50.1	59.1	93	42	47	47	47	72	58	67	0.329	0.328	0.331	2.52	0.81	0	5.4	6.5	5.9	6.1
June	29.87	30.31	29.40	64.2	70.4	65.3	74.2	58.6	66.4	95	53	56	56	57	75	63	77	0.446	0.458	0.473	3.47	1.30	0	7.0	6.8	6.5	6.9
July	29.92	30.14	29.50	70.9	78.7	73.1	81.7	64.7	73.2	99	55	61	61	62	72	55	70	0.544	0.538	0.569	1.17	0.35	0	5.6	5.3	5.9	5.5
August	30.02	30.27	29.74	70.7	79.2	73.6	82.8	66.3	74.6	98	57	65	65	66	82	63	78	0.622	0.618	0.643	4.97	1.48	0	6.2	5.9	5.5	5.8
September	30.01	30.50	29.45	58.8	68.0	62.1	70.6	55.3	63.0	93	45	52	53	54	80	61	76	0.412	0.428	0.434	3.69	1.76	0	3.8	4.4	3.8	4.0
October	30.00	30.63	29.35	48.9	57.6	52.9	60.3	44.9	52.6	74	32	42	41	43	77	56	70	0.290	0.280	0.297	3.95	1.36	0	6.2	5.9	5.6	6.3
November	29.98	30.51	29.27	39.9	47.8	44.3	51.2	36.7	44.0	66	23	32	32	34	74	57	66	0.197	0.193	0.203	4.66	2.25	3	6.0	6.2	5.0	6.2
December	30.04	30.56	29.10	28.3	34.0	31.3	37.4	25.0	31.2	50	16	22	22	22	76	60	66	0.122	0.122	0.120	5.09	3.36	4.6	5.5	4.7	4.9	5.2
Year	29.97	30.84	29.08	47.9	55.2	51.2	58.8	43.5	51.2	99	10	40	40	41	74	59	69	0.296	0.299	0.308	43.67	3.36	8.8	5.8	6.0	5.6	6.0

BROWNSVILLE, TEX.

[$\phi=25^{\circ}54' N.$; $\lambda=97^{\circ}30' W.$]

January	29.89	30.34	29.55	58.7	62.5	62.2	67.2	55.7	61.4	79	37	57	57	58	94	84	87	0.495	0.497	0.511	2.09	0.98	0.0	8.5	8.5	8.7	8.7
February	29.95	30.48	29.48	57.8	66.1	65.0	70.6	54.7	62.6	91	40	54	55	56	88	69	74	0.446	0.464	0.475	1.30	0.82	0	7.2	6.5	5.8	6.7
March	29.91	30.27	29.54	60.1	68.0	65.2	70.7	56.8	63.8	84	42	57	57	57	89	70	76	0.496	0.496	0.493	0.69	0.24	0	7.6	8.7	7.4	7.7
April	29.82	30.08	29.39	66.8	77.3	73.9	79.9	65.0	72.4	99	49	63	60	62	89	55	68	0.603	0.555	0.588	0.51	0.47	0	5.7	4.1	4.5	4.8
May	29.85	30.08	29.58	71.3	82.4	78.0	84.1	70.2	77.2	88	62	69	66	68	92	59	72	0.709	0.655	0.692	6.83	3.98	0	3.5	5.1	5.1	4.7</

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

BLOCK ISLAND, R. I.																													
[H=35 ft.; H _b =27 ft.; h _t =11 ft.; h _r =3 ft.; h _a =46 ft.]																													
Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from											Precipitation	Snow		Fog		Maximum temp.	32° temperature or below	Elec- tricity					
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January.....	Mi. 17.4	SW.	39	SE.	7	6	5	7	10	2	13	6	13	0	4	5	22	17	14	2	2	0	16	11	1	0	11	0	0
February.....	19.2	W.	47	NE.	13	8	3	3	5	8	4	11	14	0	5	13	10	8	6	5	3	0	8	4	3	0	20	0	0
March.....	19.5	NW.	43	SE.	13	6	2	5	3	3	6	10	27	0	7	13	11	16	12	11	8	0	8	2	3	0	22	0	0
April.....	16.4	E.	42	E.	6	8	8	9	6	6	10	7	6	0	5	12	13	14	10	2	0	15	6	0	0	0	0	1	0
May.....	13.6	SW.	30	NW.	0	3	6	4	1	17	15	10	6	0	6	12	13	11	9	0	0	0	20	12	0	0	0	3	0
June.....	11.3	SW.	29	SW.	0	6	8	6	10	7	12	8	3	0	3	10	17	14	12	0	0	0	22	12	0	0	0	10	0
July.....	11.1	SW.	27	SW.	0	3	7	7	4	11	20	6	4	0	8	16	7	7	5	0	0	0	23	5	0	0	0	3	0
August.....	12.0	SW.	32	NE.	1	4	8	5	2	13	22	4	4	0	6	14	11	8	8	0	0	0	27	13	0	0	0	4	0
September.....	13.7	SW.	38	NE.	3	9	10	3	5	9	11	6	7	0	16	5	9	8	7	0	0	0	12	5	0	0	0	1	0
October.....	15.7	S.	36	NW.	6	7	5	3	6	14	8	8	11	0	12	9	10	8	6	0	0	10	1	0	0	0	0	1	0
November.....	17.6	W.	45	SE.	11	7	0	2	4	5	10	17	15	0	14	6	10	13	10	1	1	0	9	0	0	0	3	1	0
December.....	17.7	NW.	40	NW.	9	13	4	3	2	1	10	11	18	0	12	11	8	9	9	5	2	0	6	1	3	0	21	0	0
Year.....	15.4	SW.	47	NE.	69	80	66	57	58	96	141	104	128	0	98	126	141	133	108	26	16	0	176	72	10	0	77	24	0

BOISE, IDAHO

[H=2,713 ft.; H_b=2,739 ft.; h₁=79 ft.; h_r=72 ft.; h_a=87 ft.]

January.....	5.1	SE.	21	SE.	0	5	2	3	25	3	2	3	16	3	4	10	17	17	12	22	17	0	3	1	22	0	31	0	0	0
February.....	6.8	SE.	23	SE.	0	2	0	1	29	3	1	4	16	0	1	11	16	14	10	14	10	0	0	0	4	0	24	0	0	0
March.....	6.6	SE.	26	SE.	0	6	2	4	30	1	5	1	13	0	5	10	16	12	9	6	2	1	0	0	0	0	11	1	0	0
April.....	8.1	SE.	24	NW.	0	2	2	3	21	5	1	2	23	1	4	13	13	11	9	8	3	0	0	0	0	0	4	1	0	0
May.....	6.4	NW.	22	SW.	0	6	3	2	18	1	0	3	27	2	14	11	6	4	3	0	0	0	0	0	0	0	0	1	2	0
June.....	5.8	NW.	24	NW.	0	4	2	2	22	2	2	5	21	0	12	9	9	6	5	0	0	0	0	0	0	3	0	4	0	0
July.....	5.7	NW.	27	NW.	0	4	3	1	16	4	2	5	27	0	19	11	1	2	1	0	0	0	0	0	0	20	0	4	0	0
August.....	5.3	NW.	15	NW.	0	4	2	1	16	3	0	4	32	0	27	4	0	0	0	0	0	0	0	0	0	14	0	0	1	0
September.....	5.1	NW.	21	SE.	0	5	1	5	12	2	1	5	28	1	20	9	1	3	2	0	0	0	0	0	0	7	0	3	0	0
October.....	4.5	SE.	18	NW.	0	3	1	4	19	2	0	10	23	0	20	3	8	5	3	0	0	0	0	0	0	0	1	0	3	0
November.....	6.2	SE.	21	SE.	0	4	1	6	30	1	1	4	12	1	6	6	18	15	9	1	0	0	2	2	0	0	5	0	0	0
December.....	5.7	SE.	23	SE.	0	3	2	4	22	4	0	6	21	0	5	10	16	11	9	6	1	0	7	3	0	0	22	0	0	0
Year.....	5.9	SE.	27	NW.	0	48	21	36	260	31	15	52	259	8	137	107	121	100	72	57	33	1	12	6	26	44	98	14	6	0

BOSTON, MASS.¹[H=12 ft.; H_b=29 ft.; h₁=33 ft.; h_r=3 ft.; h_a=62 ft.]

January.....	10.4	W.	39	S.	1	12	4	3	4	2	14	14	9	0	6	5	20	15	14	6	4	0	13	3	1	0	21	0	0	0
February.....	11.9	W.	35	NE.	2	7	2	6	4	3	5	15	14	0	9	8	11	6	4	11	0	0	6	3	3	0	23	0	0	2
March.....	12.8	W.	35	NE.	1	2	4	2	3	2	10	20	19	0	10	9	12	9	8	13	5	0	10	0	3	0	26	0	1	0
April.....	11.7	NW.	42	E.	1	11	12	4	7	5	6	5	10	0	7	6	17	13	12	3	1	0	10	1	0	0	2	0	1	0
May.....	9.3	W.	28	NE.	0	4	7	7	5	13	6	10	8	2	9	8	14	13	6	0	0	0	13	4	0	1	0	3	3	0
June.....	8.6	E.	26	SW.	0	4	10	12	11	3	9	3	8	0	5	9	16	13	9	0	0	0	14	3	0	1	0	3	0	0
July.....	8.5	SW.	37	N.	1	3	5	9	3	9	18	13	2	0	9	13	9	8	7	0	0	1	5	0	0	6	0	3	1	0
August.....	8.0	SW.	25	W.	0	2	6	6	4	8	23	10	3	0	8	11	12	11	9	0	0	0	10	3	0	6	0	8	0	0
September.....	9.7	SW.	27	S.	0	10	8	3	3	5	17	6	8	0	15	8	7	7	7	0	0	0	15	1	0	2	0	2	1	0
October.....	12.1	S.	48	S.	3	3	2	3	3	18	11	13	9	0	6	12	13	8	6	0	0	0	5	2	0	0	0	0	4	0
November.....	11.4	W.	37	E.	2	3	0	5	3	4	11	24	9	1	8	11	11	11	8	4	1	0	7	1	0	0	6	0	0	0
December.....	10.7	NW.	29	W.	0	11	3	1	3	1	12	9	22	0	11	10	10	9	9	6	3	0	7	1	5	0	27	0	0	0
Year.....	10.4	W.	48	S.	11	72	63	61	53	73	142	142	121	3	103	110	152	123	99	43	14	1	115	22	12	16	105	21	13	0

BROWNSVILLE, TEX.

[H=34 ft.; H_b=57 ft.; h₁=88 ft.; h_r=80 ft.; h_a=96 ft.]

January.....	12.0	NW.	34	SE.	3	11	2	5	16	8	0	0	20	0	0	8	23	17	11	0	0	0	12	6	0	0	0	0	0
February.....	11.4	SE.	32	N.	1	9	2	8	13	8	1	0	15	0	5	13	10	9	5	0	0	0	7	1	0	1	0	1	0
March.....	11.0	SE.	35	NW.	1	7	9	14	17	2	1	0	12	0	1	13	17	11	4	0	0	0	6	1	0	0	0	1	0
April.....	12.1	SE.	29	S.	0	2	5	13	33	3	1	0	3	0	9	15	6	4	2	0	0	0	10	1	0	1	0	0	0
May.....	11.1	SE.	35	N.	1	1	2	17	34	4	1	0	3	0	10	16	5	6	4	0	0	0	4	0	0	0	3	0	0
June.....	10.8	SE.	28	SE.	0	0	0	14	42	2	0	0	1	1	17	11	2	3	1	0	0	0	1	0	0	15	0	3	0
July.....	10.1	SE.	26	SE.	0	1	0	12	46	3	0	0	0	0	14	9	8	11	9	0	0	0	0	0	0	13	0	6	0
August.....	9.4	SE.	24	NE.	0	0	0	4	50	6	1	0	1	0	15	15	1	5	3	0	0	0	0	0	0	30	0	4	0
September.....	9.0	SE.	24	SE.	0	7	6	16	24	2	0	0	5	0	14	12	4	5	5	0	0	0	4	0	0	20	0	2	0
October.....	9.7	SE.	28	N.	0	5	2	13	27	7	1	1	6	0	18	9	4	6	4	0	0	0	2	0	0	9	0	1	0
November.....	10.5	SE.	32	NW.	2	9	2	10	19	6	1	0	13	0	8	13	9	6	4	0	0	0	3	0	0	0	0	0	0
December.....	10.2	SE.	30	NW.	0	4	3	13	18	3	2	2	17	0	6	11	14	16	12	0	0	0	8	1	0	0	0	1	0
Year.....	10.6	SE.	35	N.	8	56	33	139	339	54	9	3	96	1	117	145	103	99	64	0	0	0	57	10	0	89	0	22	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

BUFFALO, N. Y.

[$\phi=42^{\circ}53' N.$; $\lambda=78^{\circ}53' W.$]

Month	Pressure			Temperature								Moisture															
	Monthly mean	Extremes		Mean				Extremes		Dew point	Relative humidity		Vapor pressure		Precipitation		Cloudiness										
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight		
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>						
January	29.32	29.94	28.66	29.8	32.8	33.0	39.8	25.0	32.4	57	14	26	27	28	83	79	79	0.144	0.152	0.157	4.42	1.01	9.7	8.1	8.1	7.2	8.2
February	29.11	29.69	28.44	25.9	29.6	30.0	35.2	22.1	28.6	62	9	20	21	23	78	71	74	.112	.118	.131	2.12	.64	10.9	7.9	7.0	6.4	7.4
March	29.12	29.60	28.68	25.8	28.8	28.2	32.7	23.0	27.8	44	12	21	22	23	80	74	80	.113	.118	.125	1.81	.34	14.6	6.8	7.2	6.4	7.1
April	29.13	29.59	28.61	40.0	44.2	43.2	50.0	36.1	43.0	67	23	34	35	36	80	73	78	.199	.210	.219	4.58	1.00	.5	7.0	6.7	7.4	7.1
May	29.15	29.55	28.81	52.4	56.8	56.6	62.2	48.0	55.1	81	35	44	44	46	76	67	70	.298	.296	.325	3.02	1.14	.0	6.0	4.6	5.8	5.5
June	29.10	29.40	28.77	63.2	67.7	67.9	71.2	59.1	65.2	88	51	56	56	57	79	69	70	.456	.453	.470	5.94	2.06	.0	6.1	4.9	5.3	5.6
July	29.14	29.33	28.84	68.4	73.6	73.2	77.2	64.8	71.0	87	52	61	62	62	78	69	69	.543	.575	.560	3.00	1.16	.0	5.9	5.4	4.9	5.3
August	29.24	29.48	28.92	70.1	76.3	74.5	79.9	66.7	73.3	88	59	64	64	65	80	68	73	.596	.611	.622	2.08	1.57	.0	4.9	5.3	4.3	5.3
September	29.24	29.69	28.61	57.9	65.1	63.0	68.8	53.9	61.4	85	39	60	52	51	76	63	66	.385	.409	.398	1.09	.72	.0	4.4	5.7	4.4	5.1
October	29.17	29.79	28.59	45.4	50.6	48.5	54.4	41.8	48.1	76	29	40	41	40	81	70	72	.264	.271	.262	3.55	1.56	.8	6.3	7.5	6.1	7.3
November	29.18	29.71	28.52	37.7	42.0	39.8	44.9	33.8	39.4	65	22	31	32	31	76	67	73	.178	.184	.180	2.34	.82	5.2	7.4	7.5	6.8	7.6
December	29.23	29.78	28.66	26.3	29.2	28.4	32.5	23.3	27.9	42	9	22	23	22	82	77	78	.119	.124	.121	3.78	1.07	38.2	8.4	7.6	7.2	7.9
Year	29.18	29.94	28.44	45.2	49.7	48.9	54.1	41.5	47.8	88	9	39	40	40	79	71	74	.284	.293	.298	37.73	2.06	79.9	6.6	6.5	6.0	6.6

BURLINGTON, VT.

[$\phi=44^{\circ}29' N.$; $\lambda=73^{\circ}12' W.$]

January	29.76	30.48	28.96	25.1	29.2	28.3	35.8	19.5	27.6	57	0	20	22	21	81	73	74	0.120	0.127	0.121	1.63	0.59	4.4	7.5	7.7	6.2	7.5
February	29.50	30.02	28.62	22.0	27.7	26.0	33.4	17.9	25.6	53	2	17	20	19	80	71	72	.099	.114	.105	1.59	.90	3.9	7.5	7.4	6.9	7.2
March	29.43	29.98	28.74	20.8	27.5	25.1	30.9	16.7	23.8	42	4	16	19	18	79	68	74	.091	.105	.102	2.69	1.36	26.3	7.4	7.1	6.6	7.1
April	29.56	30.06	29.11	38.2	46.6	44.0	50.0	33.4	41.7	66	16	31	32	32	76	60	66	.176	.188	.185	1.33	.29	1.7	6.1	6.9	6.3	6.5
May	29.49	29.98	29.24	53.7	62.6	60.0	67.6	46.4	57.0	88	32	45	46	47	74	60	66	.306	.327	.334	4.27	1.92	.0	6.0	6.3	7.4	6.2
June	29.46	29.83	29.07	62.2	70.1	66.6	74.2	54.7	64.4	86	46	54	55	55	77	61	67	.430	.438	.434	3.97	1.42	.0	6.6	6.4	7.1	6.6
July	29.50	29.70	29.07	67.5	76.7	72.3	81.0	61.1	71.0	92	53	60	61	60	78	60	66	.520	.541	.517	2.97	1.23	.0	5.4	5.0	5.1	5.4
August	29.61	29.87	29.21	68.0	78.1	73.0	81.9	62.1	72.0	91	50	62	63	62	82	62	71	.573	.595	.574	4.18	1.21	.0	5.2	4.3	5.9	5.1
September	29.60	30.10	28.99	55.6	65.7	60.1	69.1	49.8	59.4	90	36	49	50	50	80	60	70	.367	.386	.380	1.82	1.21	.0	4.6	5.5	5.3	5.5
October	29.55	30.19	28.77	44.8	51.3	48.4	55.5	39.6	47.6	78	22	38	37	39	75	60	70	.243	.241	.261	2.89	1.05	T	7.5	7.5	6.6	7.4
November	29.55	30.14	29.00	35.2	40.2	38.4	44.1	31.4	37.8	61	14	28	29	30	76	64	69	.159	.167	.169	2.42	1.37	T	7.7	8.7	6.8	8.6
December	29.62	30.16	28.70	19.4	24.1	21.6	29.3	14.4	21.8	40	-8	16	18	16	84	77	79	.093	.102	.097	2.29	.98	15.6	7.0	6.8	5.5	6.5
Year	29.55	30.48	28.62	42.7	50.0	47.0	54.4	37.2	45.8	92	-8	36	38	37	78	65	70	.265	.278	.273	32.05	1.92	51.9	6.5	6.6	6.3	6.6

CAIRO, ILL.

[$\phi=37^{\circ}0' N.$; $\lambda=89^{\circ}10' W.$]

January	29.75	30.13	29.24	37.0	40.3	40.2	46.3	32.1	39.2	67	13	34	36	36	90	84	84	0.219	0.233	0.227	15.45	3.30	T	8.5	8.4	8.0	8.4
February	29.68	30.25	29.07	34.2	38.8	40.5	44.6	30.2	37.4	67	18	31	34	35	87	83	80	.181	.206	.211	1.57	.58	3.6	7.5	7.0	5.3	6.7
March	29.70	29.96	29.06	38.5	46.7	46.2	53.3	36.2	44.8	81	25	33	34	35	81	62	63	.195	.203	.210	1.36	.50	T	6.3	6.8	7.2	6.7
April	29.53	30.03	29.07	51.6	61.1	63.0	67.2	49.5	58.4	88	38	44	45	47	76	58	59	.306	.190	.350	4.39	1.15	.0	6.3	6.8	5.7	6.3
May	29.59	29.79	29.37	63.3	73.8	74.0	77.9	61.0	69.4	94	50	56	54	56	79	53	56	.468	.438	.460	4.92	1.87	.0	5.6	6.4	5.8	6.0
June	29.56	29.90	29.31	71.6	81.2	81.2	85.3	69.6	77.4	96	59	65	64	65	81	57	60	.632	.604	.632	3.06	1.30	.0	6.2	7.4	6.5	6.9
July	29.61	29.80	29.42	72.0	83.8	82.7	87.3	71.2	79.2	95	61	66	65	67	83	53	60	.659	.618	.667	1.53	.67	.0	4.5	6.2	5.3	5.5
August	29.62	29.82	29.42	73.8	86.7	85.4	90.8	73.3	82.0	97	67	69	68	69	86	55	59	.716	.685	.715	.42	.25	.0	4.0	6.2	6.1	5.5
September	29.67	29.95	29.36	62.3	75.0	74.0	79.1	61.2	70.2	94	47	57	58	59	83	58	60	.495	.514	.529	3.18	.96	.0	4.3	4.8	4.9	4.3
October	29.65	30.07	29.11	51.1	62.2	60.9	66.7	49.0	57.8	87	31	46	44	47	84	55	62	.343	.329	.353	4.47	2.79	.0	5.7	6.1	4.6	5.6
November	29.76	30.31	29.23	39.8	48.2	47.8	53.4	37.6	45.5	81	16	33	32	33	77	55	59	.205	.200	.211	1.99	.60	1.3	6.7	5.2	5.0	5.6
December	29.79	30.21	29.22	32.7	37.9	38.4	42.3	29.5	35.9	62	9	28	30	32	84	75	78	.178	.196	.204	3.04	1.35	.5	7.4	8.4	7.5	8.3
Year	29.66	30.31	29.06	52.3	61.3	61.2	66.2	50.0	58.1	97	9	47	47	48	83	62	65	.383	.368	.397	45.38	3.30	5.4	6.1	6.6	6.0	6.3

CANTON, N. Y.

[$\phi=44^{\circ}36' N.$; $\lambda=75^{\circ}10' W.$]

January	29.70	30.46	28.92	26.2	30.4	26.7	36.3	18.3	27.3	55	-1	22	24	22	86	76	82	0.135	0.138	0.125	3.95	1.22	4.3	8.0	8.9	6.3	8.0
February	29.46	30.05	28.65	20.5	27.1	24.2	32.4	14.4	23.4	55	-4	17	20	20	88	73	83	.103	.112	.109	1.45	.69	10.0	7.9	7.6	5.5	7.2
March	29.42	29.96	28.82	19.3	26.5	24.6	30.5	15.0	22.8	40	-6	16	18	19	87	69	77	.095	.102	.103	2.22	.96	21.8	6.9	6.5	6.5	6.5
April	29.51	30.00	29.04	38.9	46.8	43.8	51.6	33.4	42.5	69	21	32	33	33	76	61	67	.183	.191	.190	3.70	1.67	1.0	7.5	7.1	6.2	6.9
May	29.47	29.95	29.18	54.4	62.9	59.2	67.0	46.2	56.6	84	33	46	48	48	75	63	68	.322	.351	.339	3.49	.89	.3	6.2	6.5	5.8	6.2
June	29.43	29.74	29.06	63.1	70.7	66.8	74.5	54.9	64.7	84	47	56	56	57	78	61	71	.451	.448	.467	6.77	2.59	.0	6.6	6.3	7.3	6.2
July	29.46	29.64	29.05	68.6	78.0	72.9	81.8	60.4	71.1	90	52	61	61	62	77	58	69	.543	.553	.555	.96	.37	.0	5.1	5.5	4.8	5.4
August	29.56	29.82	29.14	67.9	79.5	72.1	82.6	61.2	71.9	93	47	62	64	64	83	60	76	.574	.603	.603	5.04	1.16	.0	6.4	4.7	5.7	5.4
September	29.56	30.06	28.94	54.7	65.3	58.9	69.2	48.1	58.6	89	35	49	49	50	83	58	72	.367	.372	.372	1.98	.96	.0	5.2	5.5	4.0	5.1
October	29.50	30.13	28.68	43.2	51.7	46.1	55.1	37.4	46.2	82	23	38	40	40	82	65	79	.245	.268	.265	3.10	.61	T	8.2	7.9	6.8	8.0
November	29.50	30.10	28.91	34.6	40.1	37.0	43.4	33.0	36.7	63	11	30	32	31	85	74	80	.173	.191	.180	3.04	1.11	1.5	8.0	9.0	6.2	8.5
December	29.58	30.17	28.70	16.9	24.1	21.2	28.2	12.3	20.2	41	-11	16	18	18	94	78	87	.095	.104	.103	2.19	.67	21.1	6.9	5.6	6.9	6.7
Year	29.51	30.46	28.65	42.4	50.3	46.1	54.4	36.0	45.2	93	-11	37	39	39	83	66	76	.274	.286	.284	37.89	.259	60.0	6.9	6.8	6.0	6.7

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

BUFFALO, N. Y.

[H=602 ft.; H_b=768 ft.; h_t=243 ft.; h_r=238 ft.; h_a=280 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Number of days															
														Precipitation			Snow		Fog		Maximum temp.		32°		Elec- tricity				
	Average hourly ve- locity	Prevaling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	19.2	Mf. SW.	57	SW.	18	0	4	10	0	12	16	12	8	0	1	10	20	19	17	12	7	0	8	0	7	0	28	0	0
February	18.0	W SW.	47	SW.	14	0	5	2	3	10	9	20	7	0	4	7	17	17	7	19	16	0	2	0	16	0	25	1	0
March	17.3	W SW.	45	W SW.	12	0	8	3	4	3	14	20	10	0	6	6	19	17	13	24	17	0	6	0	12	0	31	3	0
April	15.7	SW SW.	54	SW.	8	3	7	9	7	7	13	8	6	0	6	7	17	17	12	6	3	0	7	2	0	8	2	0	
May	12.5	SW SW.	45	W SW.	5	2	7	6	2	11	24	6	4	0	10	10	11	13	12	0	1	8	0	0	0	0	2	0	0
June	10.9	SW SW.	40	SW.	1	2	9	3	3	7	19	10	7	0	8	14	8	13	12	0	0	0	6	0	0	0	7	0	0
July	13.0	SW SW.	50	SW.	7	4	6	3	2	10	27	6	4	0	10	11	10	8	6	0	0	0	1	0	0	0	7	0	0
August	9.8	SW SW.	40	SW.	2	3	12	6	3	15	13	8	2	0	10	11	10	8	6	0	0	0	4	1	0	0	5	0	0
September	13.0	S SW.	45	SW.	5	1	7	4	4	14	9	10	11	0	9	14	7	9	5	0	0	0	0	0	0	0	1	0	0
October	16.2	S SW.	52	SW.	11	4	6	3	10	11	9	9	10	0	3	11	17	13	10	7	1	0	7	0	0	0	2	1	0
November	18.9	W SW.	61	SW.	11	1	2	4	2	11	15	20	5	0	4	5	21	16	12	12	6	0	2	0	3	0	14	2	0
December	17.0	W SW.	54	SW.	11	2	3	7	2	4	12	25	7	0	4	6	21	19	15	20	14	0	9	0	11	0	28	0	0
Year	15.1	SW SW.	61	SW.	105	22	76	60	42	115	180	154	81	0	75	112	178	169	127	100	64	1	60	3	49	0	136	31	0

BURLINGTON, VT.

[H=398 ft.; H_b=403 ft.; h_t=11 ft.; h_r=3 ft.; h_a=48 ft.]

January	12.1	S.	37	S.	4	14	4	2	3	25	2	7	5	0	4	6	21	13	8	16	5	0	7	3	10	0	27	0	0
February	10.4	NW.	44	SE.	3	7	5	2	5	13	1	8	15	0	4	5	19	9	4	16	7	0	6	0	11	0	26	0	0
March	8.4	NW.	31	S.	0	12	6	1	4	11	2	9	17	0	6	5	20	12	11	21	12	0	6	0	16	0	31	0	2
April	9.2	NW.	29	S.	0	12	6	5	11	7	2	7	10	0	7	5	18	14	8	5	2	0	10	0	0	0	11	0	2
May	7.6	NW.	30	SE.	0	14	2	1	10	14	5	3	13	0	8	6	17	14	12	0	0	0	11	2	0	0	3	3	3
June	7.3	S.	25	S.	0	9	2	2	8	20	2	4	13	0	3	14	13	12	10	0	0	0	10	0	0	0	3	1	1
July	7.6	S.	26	S.	0	8	0	2	8	29	2	3	9	1	11	8	12	8	7	0	0	0	6	0	0	2	0	7	1
August	7.0	S.	22	S.	0	7	2	3	4	32	2	4	8	0	10	12	9	12	12	0	0	0	10	0	0	1	0	9	1
September	8.1	S.	31	S.	0	9	1	3	9	22	2	7	6	1	9	11	10	8	7	0	0	1	7	1	0	1	0	2	3
October	11.2	SE.	39	SE.	2	5	1	4	3	28	2	10	9	0	0	14	17	15	11	2	0	0	9	1	0	0	6	1	4
November	10.5	S.	42	S.	2	4	0	2	8	23	4	7	12	0	2	4	24	12	10	8	0	0	9	2	3	0	18	0	0
December	9.6	S.	32	S.	1	6	9	6	6	19	2	4	10	0	7	8	16	10	5	23	10	0	5	0	18	0	31	0	0
Year	9.1	S.	44	SE.	12	107	38	33	79	243	28	73	127	2	71	98	196	139	105	91	36	1	96	9	58	4	150	25	17

CAIRO, ILL.

[H=315 ft.; H_b=358 ft.; h_t=87 ft.; h_r=80 ft.; h_a=93 ft.]

January	11.0	N.	30	N.	0	18	10	5	7	9	4	4	4	1	5	1	25	16	14	5	0	0	3	0	3	0	17	5	0
February	11.4	S.	32	SW.	1	8	2	2	5	13	8	5	13	0	6	10	12	8	6	7	1	0	2	0	3	0	17	1	0
March	10.7	N.	29	SW.	0	20	5	2	5	7	8	7	8	0	5	10	16	5	5	1	0	0	0	0	0	0	11	3	0
April	10.7	S.	30	SW.	0	7	4	4	11	13	10	5	6	0	6	9	15	11	11	0	0	2	0	0	0	0	8	0	0
May	7.7	N.	51	N.	1	12	11	4	10	8	7	4	5	1	5	16	10	9	8	0	0	1	0	0	0	6	0	6	0
June	7.2	N.	28	SW.	0	13	4	4	10	11	9	6	3	0	4	8	18	8	7	0	0	0	0	0	0	7	0	12	0
July	7.1	S.	24	N.	0	11	11	3	6	16	11	1	1	2	9	12	10	6	3	0	0	0	0	0	0	5	0	9	0
August	6.1	NE.	18	NW.	0	7	16	6	8	14	6	1	2	2	8	14	9	6	2	0	0	0	0	0	0	22	0	10	0
September	7.5	N.	31	NW.	0	18	10	4	5	16	1	0	5	1	16	4	10	6	6	0	0	0	0	0	0	1	0	4	0
October	8.6	SW.	28	W.	0	14	7	5	3	15	8	3	7	0	11	10	10	10	7	0	0	0	2	1	0	0	1	0	0
November	9.0	N.	25	N.	0	12	9	2	6	11	6	4	10	0	10	8	12	10	8	5	3	0	2	0	1	0	12	0	0
December	8.7	SW.	23	N.	0	9	7	5	5	11	12	4	9	0	3	3	25	12	8	4	2	0	6	3	5	0	15	0	0
Year	8.8	N.	51	N.	2	149	96	46	81	144	90	44	73	7	88	105	172	107	85	22	6	3	15	4	12	41	73	58	0

CANTON, N. Y.

[H=406 ft.; H_b=414 ft.; h_t=10 ft.; h_r=4 ft.; h_a=61 ft.]

January	11.4	W.	34	W.	2	6	7	14	1	0	18	15	1	0	3	11	18	17	15	16	5	0	6	0	12	0	29	0	0
February	9.3	W.	28	SE.	0	3	4	9	5	2	10	18	5	0	2	7	18	9	4	17	7	0	1	0	17	0	26	1	0
March	9.6	W.	29	E.	0	2	6	6	1	5	12	22	8	0	6	8	17	15	10	24	15	0	3	1	19	0	30	0	4
April	9.7	E.	35	SW.	1	5	3	19	6	3	9	14	1	0	5	9	16	13	11	9	5	0	5	0	0	0	12	1	3
May	8.5	SW.	24	W.	0	4	3	11	1	5	18	16	2	2	7	10	14	16	12	2	2	1	9	0	0	0	2	3	3
June	6.7	W.	22	W.	0	3	4	14	4	5	10	19	1	0	5	15	10	15	12	0	0	2	10	0	0	0	5	2	0
July	7.1	SW.	24	SW.	0	4	1	7	1	7	23	16	2	1	10	12	9	8	6	0	0	0	5	0	0	0	6	0	0
August	6.3	SW.	25	W.	0	2	2	8	2	7	22	17	1	1	8	12	11	12	8	0	0	0	4	0	0	1	0	7	2
September	7.8	SW.	25	W.	0	3	4	5	1	6	24	14	3	0	12	9	9	9	9	0	0	1	0	1	0	0	1	0	0
October	8.6	SW.	29	W.	0	3	4	6	1	1	22	10	12	3	1	11	19	17	16	6	1	1	5	3	0	0	10	2	2
November	9.7	W.	34	SW.	2	7	3	1	2	1	23	17	6	0	2	5	23	14	11	10	3	0	6	2	2	0	16	1	1
December	8.8	W.	29	W.	0	6	11	6	0	1	15	18	5	0	6	13	12	15	10	24	12	0	2	0	18	0	31	0	1
Year	8.6	W.	35	SW.	5	48	52	106	25	43	196	206	47	7	67	122	176	160	124	108	50	5	56	7	68	1	154	26	18

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

CAPE HENRY, VA.

[$\phi=36^{\circ}56'$ N.; $\lambda=76^{\circ}00'$ W.]

Month	Pressure			Temperature								Moisture															
	Extremes			Mean				Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness					
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snow fall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	T	8.7	8.6	8.1	8.9
January	30.22	30.66	29.69	50.6	55.1	50.7	58.5	45.3	51.9	78	34	47	48	47	87	79	87	0.340	0.036	0.333	5.88	1.85	6.5	6.6	6.5	5.3	6.3
February	30.00	30.48	29.23	38.1	44.9	42.1	48.8	34.2	41.5	77	23	33	34	33	82	67	71	.200	.208	.261	3.03	.98	.0	5.2	4.5	3.8	4.7
March	29.95	30.47	29.46	41.7	48.5	45.8	52.4	38.0	45.2	76	27	35	35	36	77	62	69	.213	.214	.220	3.23	1.77	.0	5.2	4.5	3.8	4.7
April	29.96	30.38	29.43	52.8	59.4	56.3	63.3	47.8	55.6	87	38	46	44	45	79	62	68	.323	.304	.311	5.34	2.60	.0	5.6	5.2	5.1	5.4
May	29.98	30.34	29.69	64.2	70.9	65.7	73.5	57.2	65.4	94	45	56	56	56	77	60	72	.471	.464	.463	1.58	.54	.0	4.2	3.2	4.1	3.6
June	29.91	30.20	29.55	73.4	80.5	74.3	83.2	67.0	75.1	94	56	67	67	67	80	65	79	.664	.676	.664	3.67	1.43	.0	5.8	4.8	6.3	5.5
July	29.97	30.18	29.77	76.5	82.3	78.2	84.9	71.5	78.2	95	62	70	70	70	81	67	78	.748	.733	.744	3.49	2.02	.0	4.8	5.1	6.6	5.2
August	30.06	30.28	29.85	76.2	83.4	77.1	85.4	71.2	78.3	94	63	72	71	72	87	68	84	.786	.771	.778	4.51	2.00	.0	5.6	4.8	6.0	5.2
September	30.04	30.46	29.66	68.6	74.2	68.6	75.8	63.5	69.6	93	53	61	61	61	78	65	76	.550	.550	.546	3.94	2.17	.0	4.2	4.4	3.9	4.5
October	30.03	30.56	29.42	57.9	63.3	59.4	66.3	53.8	60.0	86	41	51	50	50	80	65	73	.409	.390	.390	4.51	1.55	.0	5.4	6.2	4.8	5.9
November	30.09	30.65	29.47	47.2	54.8	50.3	56.9	42.9	49.9	72	28	40	41	41	78	60	72	.267	.272	.281	4.40	3.39	.0	5.1	4.7	3.0	4.7
December	30.13	30.55	29.47	39.5	44.8	42.2	47.1	35.1	41.1	73	24	33	33	33	76	65	71	.199	.203	.199	1.79	.55	.3	5.7	5.7	4.2	5.7
Year	30.03	30.66	29.23	57.2	63.5	59.2	66.3	52.3	59.3	95	23	51	51	51	80	65	75	.431	.429	.428	45.37	3.39	6.8	5.6	5.3	5.1	5.5

CHARLES CITY, IOWA

[$\phi=43^{\circ}04'$ N.; $\lambda=92^{\circ}38'$ W.]

January	29.00	29.46	28.20	4.7	13.3	9.3	18.5	-4.7	6.9	38	-24	2	7	5	87	73	82	0.054	0.067	0.057	2.41	0.83	19.0	6.1	4.9	3.7	4.6
February	28.88	29.57	28.10	9.2	19.4	19.2	24.6	4.8	14.7	40	-19	6	13	15	88	74	84	.065	.083	.094	1.25	.75	9.7	4.7	6.0	6.2	5.8
March	29.03	29.39	28.44	24.3	34.1	32.9	37.7	22.2	30.0	59	6	20	22	25	83	61	70	.112	.124	.130	1.63	.98	7.2	4.8	5.2	5.5	5.0
April	28.79	29.26	28.13	40.2	50.3	49.4	53.9	37.7	45.8	77	28	36	36	37	83	62	67	.214	.223	.236	3.44	.80	1.7	7.6	6.6	6.7	6.7
May	28.89	29.14	28.48	53.4	65.9	65.4	69.9	49.7	59.8	88	34	48	49	49	83	57	58	.356	.363	.369	4.83	2.36	.0	4.3	5.5	4.4	4.6
June	28.88	29.24	28.43	61.4	73.1	72.6	77.2	56.3	66.8	96	39	56	55	57	82	55	59	.463	.456	.489	4.36	2.63	.0	5.2	6.6	5.3	5.4
July	28.90	29.09	28.59	66.5	83.2	82.2	86.3	62.6	74.4	97	50	59	59	60	79	45	49	.517	.509	.538	.70	.59	.0	2.2	3.8	3.5	3.6
August	28.94	29.23	28.67	67.2	84.3	82.5	87.4	65.4	76.4	101	56	63	63	65	86	52	56	.573	.592	.620	2.85	1.06	.0	4.0	4.5	2.8	4.2
September	28.97	29.28	28.60	53.4	72.6	68.4	76.1	50.8	63.4	94	32	48	47	49	83	42	51	.360	.349	.375	2.00	.91	.0	4.5	4.5	3.1	4.3
October	28.94	29.51	28.41	40.0	53.8	49.3	57.1	37.4	47.2	84	19	36	37	38	86	57	66	.234	.248	.254	2.24	1.14	.4	5.4	5.7	4.8	5.2
November	28.97	29.57	28.27	25.1	37.6	33.0	41.1	20.8	31.0	65	-1	20	22	23	81	55	66	.117	.129	.131	.66	.36	5.9	4.6	4.9	4.9	4.7
December	29.01	29.43	28.52	16.8	22.6	21.0	26.8	10.5	18.6	40	-5	14	16	16	86	75	80	.088	.097	.097	1.10	.50	12.2	6.3	8.0	4.8	7.2
Year	28.93	29.57	28.10	38.5	50.8	48.8	54.7	34.5	44.6	101	-24	34	36	37	84	59	66	.263	.270	.283	27.47	2.63	55.1	5.0	5.5	4.6	5.1

CHARLESTON, S. C.

[$\phi=32^{\circ}47'$ N.; $\lambda=79^{\circ}56'$ W.]

January	30.15	30.43	29.88	58.7	65.0	61.0	67.7	55.7	61.7	82	43	56	58	57	92	79	88	0.472	0.504	0.488	3.91	1.42	0.0	7.7	8.0	7.5	8.5
February	30.02	30.46	29.47	47.2	55.0	52.3	58.3	43.8	51.0	72	32	39	42	40	75	58	67	.271	.266	.279	4.68	1.36	.0	6.0	5.9	5.5	5.8
March	29.97	30.45	29.58	50.3	62.5	57.8	65.9	48.1	57.0	79	31	43	43	45	76	50	65	.298	.295	.317	1.84	0.84	.0	5.4	4.3	4.5	4.7
April	29.95	30.40	29.57	60.4	70.1	64.9	72.7	56.4	64.6	85	45	53	52	54	78	56	70	.431	.422	.439	6.55	2.24	.0	3.4	3.7	4.2	3.9
May	29.97	30.19	29.77	69.8	77.5	72.7	79.8	65.5	72.6	90	55	61	60	63	75	57	72	.552	.538	.582	1.60	1.00	.0	4.0	4.2	4.5	4.3
June	29.93	30.15	29.58	78.7	85.0	79.4	88.2	73.4	80.8	98	68	71	70	70	76	62	74	.750	.736	.746	3.11	1.30	.0	5.8	6.3	8.1	6.5
July	29.98	30.19	29.81	78.6	85.1	79.9	87.9	74.0	81.0	96	67	72	72	73	81	66	80	.787	.782	.815	9.62	3.55	.0	7.1	6.8	7.3	7.1
August	30.03	30.22	29.87	79.2	84.2	80.6	87.0	75.1	81.0	93	70	74	72	73	84	68	79	.829	.789	.819	4.09	1.00	.0	5.3	5.8	7.2	6.0
September	29.98	30.27	29.66	71.4	79.2	76.3	81.9	69.1	75.5	89	59	66	65	67	84	64	74	.658	.639	.678	4.34	2.26	.0	5.9	6.2	5.1	6.0
October	30.00	30.36	29.55	60.3	70.5	65.8	72.5	57.8	65.2	85	38	54	53	56	81	57	74	.458	.453	.499	2.68	1.07	.0	5.4	4.9	3.9	5.4
November	30.06	30.60	29.50	50.0	60.5	56.1	62.8	47.6	55.2	75	26	45	45	47	83	59	72	.323	.331	.348	4.86	2.09	.0	5.1	4.5	3.2	4.6
December	30.13	30.43	29.64	42.8	52.7	49.4	56.1	40.8	48.4	68	18	37	38	40	80	59	71	.237	.255	.260	1.48	1.26	.0	5.2	5.6	5.4	5.4
Year	30.01	30.60	29.47	62.3	70.6	66.4	73.4	58.9	66.2	98	18	56	55	57	80	61	74	.506	.501	.523	48.76	3.55	.0	5.5	5.5	5.5	5.7

CHARLOTTE, N. C.

[$\phi=35^{\circ}13'$ N.; $\lambda=80^{\circ}51'$ W.]

January	29.38	29.72	28.95	46.9	51.7	51.2	55.7	43.0	49.4	74	31	44	46	46	89	82	84	0.302	0.335	0.333	7.74	1.30	0.0	8.1	8.7	7.2	9.2
February	29.20	29.64	28.59	38.1	47.6	47.1	52.1	35.0	43.6	72	20	32	32	32	76	55	57	.193	.199	.200	2.77	1.02	5.1	6.5	6.5	5.1	6.2
March	29.16	29.64	28.81	41.4	55.1	55.5	61.3	39.4	50.4	73	24	32	32	33	70	43	46	.200	.192	.203	2.13	.89	T	3.9	3.7	4.2	3.8
April	29.15	29.60	28.74	52.3	64.4	63.0	69.3	49.0	59.2	88	35	43	42	43	72	49	53	.296	.289	.300	6.13	3.03	.0	4.4	5.1	4.5	4.8
May	29.19	29.50	28.94	63.1	75.6	74.2	81.1	58.5	69.8	93	43	53	52	52	70	46	48	.420	.408	.410	2.66	1.87	.0	3.8	4.3	4.2	4.2
June	29.14	29.40	28.81	72.5	84.0	79.0	88.3	68.1	78.2	96	62	66	65	66	80	55	65	.636	.630	.655	5.35	2.76	.0	5.7	6.1	7.2	6.2
July	29.20	29.39	29.02	73.0	84.7	80.8	88.9	69.1	79.0	98	61	67	68	68	82	58	66	.669	.686	.680	4.19	2.35	.0	5.6	6.4	7.8	6.2
August	29.26	29.50	29.09	72.9	83.9	78.2	87.9	70.2	79.0	93	66	70	70	69	90	65	76	.726	.741	.720	4.31	1.91	.0	6.2	7.1	7.8	6.7
September	29.25	29.60	28.89	63.0	75.1	71.7	78.7	60.4	69.6	91	48	58	57	59	84	55	66	.497	.485	.516	2.31	1.20	.0	5.0	5.4	3.8	4.7
October	29.22	29.69	28.72	51.5	64.3	60.6	67.5	49.2	58.4	88	34	45	45	45	81	53	66	.332	.337	.373	4.70	1.43	.0	5.6	5.7	5.4	5.7
November	29.28	29.84	28.78	41.6	54.5	50.7	57.4	38.5	48.0	71	20	34	33	36	74	46	58	.211	.211	.230	2.37	1.02	.0	4.4	4.2	3.9	4.2
December	29.32	29.71	28.82	37.1	46.4	44.8	49.8	34.3	42.0	66	14	30	32	33	76	58	64	.182	.194	.204	2.79	1.17	T	6.5	6.1	4.4	6.1
Year	29.23	29.84	28.59	54.4	65.6	63.1	69.8	51.2	60.6	98	14	48	48	49	79	55	62	.389	.392	.400	47.45	3.03	5.1	5.5	5.8	5.5	5.7

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

CAPE HENRY, VA.																													
[H = 16 ft.; H _b = 18 ft.; h _t = 8 ft.; h _r = 3 ft.; h _a = 54 ft.]																													
Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds boserved from											Precip- itation	Snow		Fog		Maxi- mum temp.		32° temperature or below	Elec- tricity				
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	Mi. 13.6	NE.	54	N.	2	7	20	6	1	7	16	1	4	0	1	1	29	20	16	1	0	0	8	9	0	0	0	0	0
February	15.0	N.	45	NW.	12	16	4	1	6	7	11	2	9	0	9	4	15	11	9	7	5	0	2	4	0	0	9	0	0
March	13.0	N.	38	NW.	6	14	8	3	7	4	11	5	7	0	14	9	8	9	7	0	0	0	1	0	0	0	4	2	0
April	14.0	SW.	38	E.	9	9	5	5	12	5	13	6	5	0	11	8	11	13	12	0	0	0	1	1	0	0	0	3	0
May	11.0	SW.	35	NE.	2	5	11	4	11	13	12	3	3	0	13	16	2	4	3	0	0	0	2	3	0	3	0	4	1
June	9.7	SW.	35	NW.	4	8	1	5	11	9	14	8	4	0	6	17	7	12	11	0	0	0	1	1	0	4	0	14	0
July	9.8	SW.	35	NE.	1	4	7	5	8	13	10	11	3	1	12	10	9	13	11	0	0	0	0	0	0	8	0	8	0
August	8.5	SW.	28	N.	0	2	6	7	11	17	17	2	0	0	11	10	10	10	8	0	0	0	2	1	0	7	0	11	0
September	12.9	NE.	36	N.	2	10	20	7	1	10	8	1	3	0	16	6	8	8	8	0	0	0	0	0	0	1	0	1	0
October	13.7	SW.	35	N.	5	7	8	13	7	10	10	3	3	1	8	10	13	13	10	0	0	0	2	0	0	0	0	0	0
November	13.2	N.	40	E.	5	10	7	2	6	13	10	3	9	0	14	6	10	8	8	0	0	0	1	1	0	0	1	1	0
December	12.4	N.	38	N.	2	20	6	3	2	6	14	5	6	0	9	10	12	9	7	2	1	0	1	1	0	0	14	0	0
Year	12.2	SW.	54	N.	50	112	103	61	83	114	146	53	56	2	124	107	134	130	110	10	6	0	21	21	0	23	28	44	1

CHARLES CITY, IOWA

[H=1,013 ft.; H_b=1,015 ft.; h_e=10 ft.; h_r=3 ft.; h_a=51 ft.]

January	7.8	SE.	22	W.	0	3	2	5	17	1	5	14	14	1	17	3	11	9	8	16	7	0	2	0	25	0	31	0	0
February	8.6	NW.	25	N.	0	6	3	1	13	5	2	14	12	0	9	8	11	7	6	17	6	0	4	0	21	0	28	0	1
March	6.9	N.	31	NE.	0	19	9	5	4	4	4	5	12	0	11	11	9	8	7	15	5	0	7	1	7	0	31	0	0
April	7.9	SE.	21	SW.	0	14	7	8	14	2	1	6	7	1	7	5	18	16	13	4	2	1	2	0	0	0	9	4	0
May	7.2	SE.	25	SE.	0	9	5	8	18	6	3	6	6	1	14	7	10	9	9	0	0	1	5	0	0	0	12	2	0
June	5.9	SE.	25	NW.	0	14	4	7	13	4	3	5	9	1	9	10	11	12	10	0	0	0	3	1	0	2	0	6	1
July	5.7	SE.	19	NW.	0	5	2	3	18	10	10	6	8	0	19	10	2	4	3	0	0	0	1	1	0	9	0	8	0
August	6.1	SE.	20	S.	0	6	2	3	21	16	6	2	5	1	13	12	6	11	9	0	0	0	0	0	0	11	0	11	0
September	6.2	SE.	21	SW.	0	5	6	0	20	9	7	4	9	0	13	12	5	6	4	0	0	0	1	0	0	6	0	3	0
October	6.2	NW.	17	SE.	0	9	2	2	14	7	4	14	9	1	11	9	11	10	7	2	2	0	7	1	0	0	9	0	1
November	7.8	NW.	25	SW.	0	2	1	1	10	10	5	12	18	1	14	4	12	5	4	9	3	0	0	0	10	0	25	1	0
December	7.3	W.	25	W.	0	2	8	3	13	4	8	12	12	0	5	8	18	12	8	15	8	0	7	5	22	0	31	0	0
Year	6.9	SE.	31	NE.	0	94	51	46	175	78	58	100	121	7	142	99	124	109	88	78	33	2	39	9	85	28	164	45	5

CHARLESTON, S. C.

[H=9 ft.; H_b=48 ft.; h_e=11 ft.; h_r=3 ft.; h_a=92 ft.]

January	10.3	SW.	29	NE.	0	9	15	5	5	12	11	2	3	0	1	7	23	14	8	0	0	0	19	7	0	0	0	0	0
February	11.5	N.	29	W.	0	13	7	7	1	3	9	9	7	0	11	4	13	10	10	0	0	0	6	2	0	0	1	1	0
March	10.1	SW.	32	N.	1	12	5	3	4	6	14	9	9	0	15	6	10	7	7	0	0	0	6	1	0	0	1	3	0
April	10.9	SW.	33	N.	1	4	4	4	5	12	14	12	5	0	17	5	8	11	9	0	0	1	2	1	0	0	0	5	0
May	10.0	S.	34	N.	1	10	5	5	3	17	12	7	3	0	14	12	5	2	2	0	0	0	7	1	0	2	0	5	0
June	9.5	SW.	28	N.	0	8	2	2	6	7	23	10	2	0	3	13	14	8	7	0	0	0	1	0	0	11	0	13	0
July	8.7	S.	29	NE.	0	5	2	2	1	16	17	18	1	0	0	17	14	14	12	0	0	0	2	0	0	11	0	12	0
August	9.2	S.	31	SE.	0	8	3	8	10	17	8	6	2	0	6	15	10	11	10	0	0	0	5	0	0	1	0	15	0
September	9.5	NE.	26	E.	0	15	12	5	3	7	8	6	4	0	8	12	10	10	8	0	0	0	4	0	0	0	0	3	0
October	11.4	NE.	29	E.	0	10	17	4	1	4	5	17	1	0	13	5	13	7	5	0	0	0	9	2	0	0	0	1	0
November	10.2	N.	30	E.	0	15	17	3	5	6	2	5	7	0	16	2	12	9	8	0	0	0	9	2	0	0	3	1	0
December	8.7	N.	28	NE.	0	19	10	5	4	3	7	7	7	0	12	8	11	5	3	0	0	0	10	3	0	0	4	0	0
Year	10.0	SW.	34	N.	3	128	99	53	48	110	130	108	54	0	116	106	143	108	89	0	0	1	80	19	0	25	9	59	0

CHARLOTTE, N. C.

[H=741 ft.; H_b 779; h_e=63 ft.; h_r=55 ft.; h_a=86 ft.]

January	8.4	NE.	25	SW.	0	8	25	2	5	11	7	3	1	0	0	3	28	20	14	0	0	0	25	15	0	0	1	0	0
February	8.3	SW.	30	SW.	0	7	12	2	4	10	12	4	5	0	7	6	15	10	7	4	3	0	13	7	0	0	12	1	0
March	8.1	SW.	25	SW.	0	6	5	3	5	9	12	11	11	0	19	3	9	8	7	1	1	0	7	0	0	0	8	1	0
April	8.3	SW.	25	SW.	0	10	13	1	2	11	16	3	4	0	13	6	11	11	10	0	0	0	10	0	0	0	0	5	0
May	7.0	S.	30	NW.	0	7	16	4	4	19	6	1	5	0	13	14	4	7	6	0	0	0	3	0	0	5	0	6	0
June	6.2	SW.	30	S.	0	8	7	4	4	17	13	3	2	2	2	16	12	12	9	0	0	0	7	0	0	13	0	14	0
July	6.1	SW.	21	SE.	0	7	12	3	2	12	14	6	6	0	5	13	13	11	6	0	0	0	7	0	0	12	0	12	0
August	6.2	S.	20	SE.	0	1	13	6	3	26	9	2	2	0	6	8	17	14	12	0	0	0	10	1	0	11	0	15	0
September	6.6	NE.	17	NE.	0	10	26	3	2	10	5	2	2	0	11	10	9	6	5	0	0	0	14	1	0	2	0	1	0
October	7.2	NE.	20	NW.	0	6	20	1	1	12	11	5	4	2	11	7	13	14	11	0	0	0	10	0	0	0	0	1	0
November	7.2	NE.	26	SW.	0	15	14	2	2	10	9	1	7	0	16	5	9	8	8	0	0	0	7	2	0	0	6	0	0
December	7.1	NE.	21	SW.	0	8	21	1	1	11	14	2	3	1	9	8	14	10	6	2	0	0	10	3	0	0	13	0	0
Year	7.2	NE.	30	SW.	0	93	184	32	35	158	128	43	52	5	112	99	154	131	101	7	4	0	123	29	0	43	40	56	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

CHATTANOOGA, TENN																											
[φ=35°4' N.;λ=85°18' W]																											
Month	Pressure			Temperature										Moisture													
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation		Cloudiness							
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
January	29.34	29.60	29.00	51.0	54.8	54.3	59.5	47.1	53.3	77	30	45	46	45	80	73	77	0.316	0.328	0.337	11.00	3.70	0.0	8.4	8.8	7.4	8.4
February	29.27	29.72	28.78	38.6	46.7	46.7	52.2	34.8	43.5	76	22	29	30	30	68	51	52	1.74	1.77	1.78	3.33	1.08	3.2	6.7	6.1	5.2	6.1
March	29.23	29.63	28.80	42.7	56.5	54.6	61.2	39.2	50.2	76	25	34	33	35	72	43	49	2.10	2.01	2.07	2.92	.89	.9	5.9	4.5	4.3	5.0
April	29.16	29.65	28.84	52.8	65.9	66.4	70.7	49.5	60.1	88	37	43	42	43	71	47	47	2.97	2.93	2.98	6.19	1.84	.0	4.6	5.4	6.0	5.1
May	29.20	29.38	28.97	63.5	78.0	74.9	81.7	59.2	70.4	95	49	54	54	55	71	45	52	4.27	4.36	4.53	4.43	1.34	.0	3.8	5.2	4.5	4.5
June	29.16	29.39	28.85	72.7	86.3	83.1	90.1	68.9	79.5	97	64	65	64	63	77	49	53	6.17	6.06	5.90	2.82	1.54	.0	5.1	5.6	5.3	5.5
July	29.21	29.45	29.06	72.5	86.2	84.7	90.3	69.3	79.8	99	57	64	64	64	77	49	51	6.16	6.01	6.02	3.34	1.78	.0	3.6	4.9	4.8	4.7
August	29.24	29.48	29.07	73.0	86.8	82.9	90.6	70.2	80.4	99	67	68	67	68	85	55	63	6.85	6.67	6.81	7.33	1.98	.0	4.4	6.0	5.3	5.7
September	29.25	29.57	29.01	63.9	78.8	74.9	82.3	62.0	72.2	91	48	59	59	60	85	52	62	5.20	5.19	5.46	2.30	.91	.0	3.0	4.2	3.7	3.8
October	29.24	29.60	28.90	52.7	65.2	61.7	68.8	49.9	59.4	88	29	46	47	48	79	54	61	3.41	3.54	3.59	5.71	1.97	.0	5.4	5.5	4.7	5.5
November	29.33	29.88	28.87	42.5	53.3	51.2	57.1	39.4	48.2	76	20	35	35	35	74	53	57	2.20	2.25	2.27	1.01	.33	T	5.7	5.4	4.5	5.2
December	29.36	29.68	28.79	38.2	46.0	45.3	50.1	35.1	42.6	67	12	32	33	34	78	62	64	1.99	2.12	2.15	3.18	1.24	1.1	6.7	6.4	5.9	6.5
Year	29.25	29.88	28.78	55.3	67.0	65.1	71.2	52.0	61.6	99	12	48	48	48	76	53	57	.385	.385	.392	53.56	3.70	5.2	5.3	5.7	5.2	5.5
CHEYENNE, WYO. ¹																											
[φ=41°8' N.;λ=104°48' W.]																											
January	23.71	24.08	23.34	8.5	21.6	15.1	24.7	0.7	12.7	48	-26	-1	8	4	63	55	60	0.040	0.062	0.050	0.47	0.25	5.6	3.4	5.1	4.1	4.6
February	23.79	24.13	23.09	21.4	34.3	31.2	38.6	14.4	26.5	56	-5	9	14	14	59	46	49	0.066	0.081	0.080	.27	.17	2.7	5.2	6.2	4.9	5.5
March	23.88	24.24	23.27	24.0	38.2	36.3	41.5	19.4	30.4	64	2	18	21	21	78	55	57	0.095	0.113	.115	2.09	.81	22.0	4.2	6.0	7.4	6.5
April	23.84	24.17	23.41	32.3	50.1	47.5	53.6	28.4	41.0	74	17	25	26	26	74	40	45	0.132	0.136	0.136	1.59	.65	15.1	5.4	6.2	6.4	6.2
May	23.95	24.28	23.60	42.0	61.5	61.0	66.6	39.1	52.8	82	28	34	34	34	76	41	43	0.202	0.201	.205	1.19	.37	.2	5.4	6.7	6.4	6.2
June	24.00	24.22	23.63	49.4	67.8	66.8	72.6	46.6	59.6	93	29	42	40	42	78	43	46	0.273	0.259	.275	1.28	.61	3.0	5.9	6.3	6.8	5.9
July	24.07	24.27	23.94	56.9	81.0	76.2	84.7	54.0	69.4	93	49	49	47	48	75	32	42	0.346	0.330	.348	1.97	.61	.0	3.1	3.6	6.3	4.5
August	24.07	24.25	23.90	57.3	82.7	79.0	87.0	55.2	71.1	94	48	45	43	42	66	27	31	0.303	0.287	.278	1.34	.52	.0	3.5	3.8	5.6	4.3
September	24.07	24.33	23.87	48.9	72.6	68.0	76.1	44.7	60.4	88	26	38	38	39	69	32	38	0.242	0.246	.248	.49	.33	.1	3.9	4.6	4.9	4.6
October	24.00	24.31	23.56	39.7	58.2	53.5	61.9	35.5	48.7	76	28	31	32	33	72	41	50	0.172	0.180	.192	1.23	.56	2.8	4.1	4.3	4.0	4.4
November	23.94	24.30	23.60	29.1	42.6	36.2	46.4	21.6	34.0	65	-8	20	24	23	68	50	62	0.108	0.127	.122	.90	.30	7.6	4.6	5.7	4.8	5.4
December	23.90	24.27	23.43	24.2	33.1	28.4	37.4	15.9	26.6	62	-9	17	20	21	74	62	74	0.096	.112	.111	1.68	.42	16.2	5.3	5.8	6.3	6.6
Year	23.94	24.33	23.09	36.1	53.6	49.9	57.6	31.3	44.4	94	-26	27	29	29	71	44	50	.173	.178	.180	14.50	.81	75.3	4.5	5.4	5.7	5.4
CHICAGO, ILL., UNIVERSITY OBSERVATORY																											
[φ=41°47' N.;λ=87°35' W.]																											
January	29.40	29.85	28.65	23.8	28.4	28.5	34.4	19.4	26.9	57	5	19	21	22	79	72	75	0.108	0.121	0.124	2.29	1.10	2.4	6.7	6.4	6.4	6.4
February	29.24	29.96	28.43	24.7	28.6	28.0	34.1	18.8	26.4	56	1	19	19	19	79	65	67	0.120	.112	.111	.63	.23	3.1	5.1	6.3	6.2	6.4
March	29.36	29.71	28.83	29.9	35.0	33.9	37.9	27.8	32.8	58	14	24	24	24	76	62	67	0.131	.129	.136	1.20	.54	4.8	7.1	5.9	5.1	6.3
April	29.19	29.67	28.52	42.3	49.8	47.4	54.0	39.0	46.5	80	31	36	38	37	78	67	69	0.219	.243	.226	4.61	1.20	.3	6.7	7.5	7.2	7.2
May	29.28	29.56	28.99	54.5	61.7	59.6	65.8	50.0	57.9	91	39	46	47	46	75	62	63	0.328	.332	.330	1.64	.52	.0	5.4	4.8	4.9	5.3
June	29.24	29.62	28.97	62.8	68.9	67.0	73.3	58.5	65.9	97	48	55	56	54	77	64	66	0.450	.462	.441	5.02	1.85	.0	6.4	5.8	5.2	5.8
July	29.26	29.44	28.93	69.4	79.9	76.3	82.3	66.4	74.4	92	54	61	62	62	76	56	64	0.555	.574	.579	1.41	.43	.0	3.3	3.8	4.1	3.6
August	29.33	29.53	29.09	70.6	80.6	77.4	83.5	67.9	75.7	95	62	64	65	66	81	61	69	0.608	.625	.634	2.68	1.03	.0	4.0	4.0	4.4	4.0
September	29.35	29.65	28.91	58.5	70.7	67.7	73.5	56.7	65.1	93	44	50	50	52	75	50	60	0.392	.396	.427	1.89	.78	.0	4.7	5.1	4.5	4.8
October	29.30	29.80	28.41	47.2	54.5	52.6	57.6	44.8	51.2	84	30	39	39	40	76	58	64	0.265	.266	.274	3.09	1.27	T	5.8	6.4	5.0	6.2
November	29.34	29.92	28.73	32.8	41.0	39.8	44.5	30.4	37.4	73	14	26	27	27	74	57	59	0.147	.159	.160	1.25	.38	2.7	4.6	4.4	4.0	4.6
December	29.38	29.86	28.90	25.0	29.0	28.3	31.7	21.6	26.6	52	6	21	22	22	82	73	75	0.118	.125	.122	1.27	.75	3.4	8.2	7.7	7.0	7.6
Total	29.30	29.96	28.41	45.1	52.3	50.5	56.0	41.8	48.9	97	1	38	39	39	77	62	66	.287	.295	.297	26.98	1.85	16.7	5.7	5.7	5.3	5.7
CINCINNATI, OHIO																											
[φ=39°9' N.;λ=84°31' W.]																											
January	29.49	29.90	28.92	35.4	40.2	39.5	46.8	30.3	38.6	67	17	32	33	34	88	77	80	0.196	0.204	0.212	13.68	2.71	6.0	8.9	8.4	7.5	8.6
February	29.36	29.95	28.64	29.9	36.1	34.7	41.1	25.8	33.4	73	12	23	26	25	74	65	68	0.134	.134	.148	1.33	.37	4.7	6.9	7.3	7.0	7.6
March	29.39	29.72	28.74	32.1	42.6	41.3	47.7	28.9	38.3	70	16	28	28	30	83	58	64	0.158	.162	.170	1.06	.40	13.0	5.8	6.1	6.5	6.4
April	29.26	29.79	28.75	46.7	58.3	55.9	63.1	42.3	52.7	83	29	39	40	41	75	53	60	0.245	.262	.273	2.93	.61	.0	6.9	6.5	7.5	7.1
May	29.33	29.56	29.05	56.7	69.7	66.8	73.3	53.1	63.2	95	41	50	52	52	77	56	61	0.378	.398	.394	2.93	.99	.0	5.5	5.4	6.0	5.9
June	29.29	29.61	29.01	67.6	78.7	74.6	82.2	63.2	72.7	93	53	62	63	62	84	59	65	0.556	.579	.559	3.66	.86	.0	6.9	7.0	6.9	6.8
July	29.34	29.54	29.13	68.7	82.4	77.4	86.4	64.2	75.3	94	50	62	64	62	80	55	62	0.575	.612	.571	3.94	2.50	.0	3.2	5.0	4.5	4.5
August	29.39	29.63	29.17	69.1	83.0	79.0	87.0	66.7	76.8	94	40	66	67	66	89	62	66	0.634	.673	.649	3.30	.73	.0	4.4	4.9	4.5	4.8
September	29.41	29.74	29.05	56.6	73.2	67.6	76.7	54.0	65.4	93	40	53	53	52	87	50	60	0.423	.428	.422	2.08	1.10	.0	4.0	4.1	3.2	3.9
October	29.37	29.83	28.76	47.7	59.5	55.4	62.7	44.7	53.7	86	29	42	43	43	82	57	64	0.296	.305	.303	3.03	1.25	T	6.2	6.0	5.9	6.2
November	29.44	30.02	28.79	36.4	45.5	43.0	49.9	33.2	41.0	71	17	30	31	30	80	63											

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

CHATTANOOGA, TENN.

[H=689 ft.; H_b=762 ft.; h_t=71 ft.; h_r=64 ft.; h_a=214 ft.]

Month	Wind												Number of days																	
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from							Number of days																	
													Precipitation			Snow		Fog		Maximum temperature 32°		Electricity								
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora	
January	9.2	SE.	25	SE.	0	2	16	3	18	12	1	6	3	1	1	7	23	20	16	0	0	0	4	1	0	0	0	1	1	0
February	9.5	NE.	42	W.	1	8	11	3	4	9	4	8	7	2	7	7	14	14	12	2	1	0	2	0	0	0	0	11	1	0
March	8.3	NW.	33	SW.	1	10	5	1	7	6	4	9	17	3	10	15	6	11	7	2	2	0	2	0	0	0	0	8	1	0
April	8.4	W.	32	SW.	1	6	2	6	3	10	11	11	6	5	15	3	12	10	8	0	0	1	2	0	0	0	0	0	6	0
May	6.9	W.	30	N.	0	2	8	7	11	4	2	16	8	4	13	12	6	12	9	0	0	0	0	0	0	0	8	0	11	0
June	6.6	W.	44	W.	1	10	3	3	2	5	8	18	7	4	7	18	5	10	7	0	0	0	2	0	0	0	14	0	11	0
July	6.6	W.	34	NW.	1	4	6	5	5	1	7	23	6	5	8	19	4	9	7	0	0	0	3	0	0	0	17	0	8	0
August	5.2	SE.	28	NW.	0	4	7	5	12	2	3	8	4	10	8	16	7	13	11	0	0	0	8	1	0	21	0	14	0	
September	5.6	SE.	27	W.	0	8	6	1	6	4	4	9	5	17	15	10	5	9	9	0	0	0	9	0	0	1	0	4	0	
October	7.4	NE.	29	W.	0	7	12	4	7	4	6	9	7	6	14	5	12	11	10	0	0	0	5	2	0	0	1	2	0	
November	7.5	NE.	38	W.	1	8	15	3	8	9	1	6	8	2	12	7	11	9	8	3	0	0	6	1	1	0	9	0	0	
December	7.0	NE.	24	NW.	0	5	13	2	7	9	4	7	10	5	7	8	16	11	8	3	1	0	5	3	1	0	11	0	0	
Year	7.3	W.	44	W.	6	74	104	43	90	82	55	130	88	64	117	127	121	139	112	10	4	1	48	8	2	61	41	59	0	

CHEYENNE, WYO.¹[H=6,139 ft.; H_b=6,994 ft.; h_t=5 ft.; h_r=15 ft.; h_a=39 ft.]

January	12.4	NW.	49	W.	9	5	4	0	2	8	6	17	19	1	12	13	6	7	4	11	7	0	8
February	18.0	NW.	56	NW.	15	2	2	1	3	4	5	22	17	0	11	7	10	4	2	8	4	0	5
March	13.2	NW.	43	NW.	5	8	3	0	11	9	6	8	16	1	3	13	15	11	9	15	11	0	10
April	14.7	NW.	49	NW.	10	11	3	2	2	3	7	14	18	0	5	16	9	9	6	13	7	0	7
May	12.7	N.	37	W.	8	17	1	1	9	5	5	12	12	0	7	11	13	8	5	2	2	3	8
June	11.1	S.	42	NW.	5	9	3	4	7	6	8	12	10	1	6	12	10	8	3	1	1	10	5
July	9.8	W.	41	NW.	1	9	6	3	0	4	6	18	16	0	11	17	3	11	8	0	0	3	0
August	9.4	NW.	38	SW.	1	5	3	5	2	8	8	19	9	3	11	16	4	7	5	0	0	2	1
September	10.0	NW.	35	NW.	3	9	3	3	4	9	8	12	11	1	10	15	5	8	4	1	1	0	4
October	11.1	NW.	38	W.	4	9	4	0	4	7	6	11	20	1	15	7	9	7	5	4	2	1	7
November	12.3	W.	49	NW.	4	9	1	0	0	6	12	19	12	1	13	4	13	9	6	11	8	0	5
December	13.2	NW.	53	W.	8	12	1	0	0	5	17	10	17	0	7	7	17	8	7	16	8	0	11
Year	12.3	NW.	56	NW.	73	105	34	19	44	74	94	174	177	9	111	138	116	99	69	84	51	10	76

CHICAGO, ILL., UNIVERSITY OBSERVATORY

[H=594 ft.; H_b=673 ft.; h_t=7 ft.; h_r=3 ft.; h_a=131 ft.]

January	11.7	W.	34	SW.	1	3	1	8	10	6	10	15	9	0	9	5	17	9	9	14	2	0	5
February	12.5	W.	30	W.	0	1	3	2	7	9	7	22	5	0	8	6	14	12	4	16	7	0	3
March	10.9	NW.	30	NE.	0	11	13	5	3	3	5	11	11	0	8	8	15	7	6	15	5	0	6
April	11.2	E.	27	W.	0	8	9	9	8	10	6	7	3	0	6	5	19	15	10	4	2	1	8
May	9.5	NE.	26	N.	0	10	8	7	11	9	7	5	5	0	10	11	10	11	7	0	0	0	6
June	9.7	NE.	29	SW.	0	13	16	8	7	3	8	4	1	0	7	14	9	12	9	0	0	5	1
July	8.3	SW.	28	SW.	0	3	12	4	7	10	11	12	3	0	17	11	3	10	6	0	0	0	1
August	7.9	S.	35	W.	1	4	9	9	12	15	6	7	0	0	14	10	7	8	6	0	0	0	6
September	10.0	S.	28	SW.	0	5	7	3	5	16	11	5	8	0	9	14	7	8	4	0	0	0	2
October	10.4	NW.	29	SW.	0	6	2	5	10	5	7	13	14	0	10	6	15	11	8	1	0	0	8
November	12.2	SW.	29	NW.	0	0	1	2	2	11	16	13	15	0	12	11	7	11	8	9	4	0	3
December	10.6	W.	25	SW.	0	1	3	4	5	8	10	20	11	0	4	8	19	12	7	12	5	0	11
Year	10.4	SW.	35	W.	2	65	84	66	87	105	104	134	85	0	114	109	142	126	84	71	25	1	63

CINCINNATI, OHIO

[H=761 ft.; H_b=627 ft.; h_t=11 ft.; h_r=3 ft.; h_a=51 ft.]

January	8.7	SW.	24	W.	0	8	13	6	3	9	14	5	4	0	2	4	25	16	13	2	1	0	2
February	9.7	SW.	35	SW.	1	5	4	4	5	11	9	10	8	0	3	8	17	11	9	15	3	0	3
March	8.6	NW.	28	SW.	0	11	8	2	5	6	8	10	12	0	8	9	14	7	5	10	4	0	4
April	9.0	SW.	30	SW.	0	6	8	5	5	11	12	7	6	0	5	7	18	15	13	0	0	0	2
May	6.5	SW.	27	W.	0	9	5	5	6	12	7	9	8	1	11	5	15	12	9	0	0	0	2
June	6.1	N.	25	SW.	0	12	7	2	7	11	7	6	8	0	4	13	13	11	10	0	0	0	0
July	5.8	SW.	24	SW.	0	4	10	5	2	3	24	9	5	0	14	10	7	6	5	0	0	0	1
August	5.3	NE.	33	W.	1	7	22	6	4	7	6	4	6	0	14	6	11	10	9	0	0	0	4
September	5.9	NE.	18	W.	0	15	16	5	2	5	9	3	4	1	16	10	4	4	4	0	0	0	2
October	7.7	SW.	30	SW.	0	13	8	5	4	8	14	4	6	0	9	7	15	14	7	1	1	0	1
November	8.0	SW.	29	SW.	0	2	4	4	3	11	16	17	3	0	7	8	15	10	8	6	4	0	4
December	8.0	SW.	26	SW.	0	1	6	7	1	9	19	13	5	1	6	6	19	16	11	7	6	0	6
Year	7.4	SW.	35	SW.	2	93	111	56	47	103	145	97	75	3	99	93	173	132	103	41	19	0	31

¹ Observations taken at airport.

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

CLEVELAND, OHIO																											
[$\phi=41^{\circ}30' N.$; $\lambda=81^{\circ}42' W.$]																											
Month	Pressure			Temperature									Moisture														
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness					
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	$^{\circ}$	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>				
January	29.33	29.86	28.69	32.6	35.2	36.4	44.4	27.2	35.8	66	18	28	28	30	84	76	77	0.164	0.164	0.181	6.58	1.79	5.3	8.1	8.2	7.7	8.2
February	29.15	29.70	28.38	28.3	32.8	32.3	38.1	23.7	30.9	69	12	22	24	24	78	69	72	.125	.137	.139	1.74	.67	6.5	8.4	8.2	7.4	8.4
March	29.18	29.58	28.60	29.1	32.2	32.8	37.0	26.4	31.7	52	12	24	24	24	81	72	71	.129	.131	.128	2.00	.66	9.7	6.8	6.2	6.5	6.7
April	29.11	29.57	28.58	43.1	47.6	49.4	54.9	39.3	47.1	71	30	36	36	37	75	68	64	.214	.221	.226	3.33	1.14	.1	6.2	6.6	7.2	6.8
May	29.18	29.48	28.86	56.0	61.9	60.9	67.5	51.4	59.4	88	39	45	46	47	69	59	62	.313	.322	.332	2.27	1.06	.0	4.8	5.2	4.5	5.0
June	29.13	29.48	28.79	64.8	69.3	69.8	73.8	61.2	67.5	84	54	58	57	57	79	67	66	.485	.480	.478	6.64	2.89	.0	5.9	5.8	5.2	5.7
July	29.17	29.36	28.89	69.8	75.8	76.1	80.3	66.1	73.2	89	54	60	61	62	73	62	62	.541	.556	.562	4.87	1.18	.0	4.4	4.5	4.7	4.6
August	29.25	29.49	28.98	70.8	77.0	75.9	80.5	68.3	74.4	93	63	64	66	64	79	69	69	.598	.631	.610	2.10	1.09	.0	4.4	4.3	4.2	4.1
September	29.26	29.63	28.76	59.1	67.1	65.7	70.4	56.2	63.3	87	45	49	50	49	70	56	56	.374	.393	.367	.99	.40	.0	4.4	4.6	4.1	4.6
October	29.19	29.74	28.56	47.5	53.3	52.4	57.4	44.3	50.8	83	31	40	40	41	76	63	66	.267	.277	.274	3.36	1.31	1.0	7.3	7.5	5.9	7.4
November	29.22	29.81	28.45	39.3	43.9	41.7	47.3	34.0	40.6	67	20	30	30	31	71	60	67	.178	.179	.183	1.47	.33	6.0	7.4	6.6	6.6	6.9
December	29.27	29.76	28.73	27.6	31.2	30.9	35.6	24.6	30.1	54	10	23	24	25	80	74	78	.125	.134	.140	2.52	.92	4.1	7.6	7.5	6.8	7.8
Year	29.20	29.86	28.38	47.3	52.3	52.0	57.3	43.6	50.4	93	10	40	40	41	76	66	68	.293	.302	.302	37.87	2.89	32.7	6.3	6.3	5.9	6.4

COLUMBIA, MO.

[$\phi=38^{\circ}57' N.$; $\lambda=92^{\circ}20' W.$]

January	29.28	29.75	28.73	23.1	28.7	33.9	17.8	25.8	51	-6	20	22	87	76	0.118	0.128	4.03	1.67	5.0	5.3	6.2	6.2	5.3	5.0	5.5	5.3	5.3
February	29.19	29.84	28.38	26.2	33.9	40.4	22.0	31.2	61	-9	20	23	77	64	.116	.132	.66	.28	6.5	5.0	5.5	5.3	5.0	5.5	5.3	5.3	5.3
March	29.25	29.54	28.47	32.4	43.4	48.2	30.5	39.4	68	14	28	30	82	79	.157	.169	2.07	1.03	12.8	4.4	6.8	5.9	5.9	5.9	5.9	5.9	5.9
April	29.03	29.54	28.57	46.8	58.4	63.5	44.3	53.9	86	28	41	42	80	58	.266	.286	3.75	1.13	T	5.6	7.5	6.8	6.8	6.8	6.8	6.8	6.8
May	29.12	29.38	28.92	59.5	72.2	75.9	56.9	66.4	91	46	54	56	81	58	.422	.457	4.67	1.68	.0	5.2	6.0	5.6	5.6	5.6	5.6	5.6	5.6
June	29.11	29.45	28.80	67.7	80.0	83.7	64.7	74.2	99	52	62	64	84	60	.574	.620	4.01	1.14	.0	6.1	5.3	5.3	5.3	5.3	5.3	5.3	5.3
July	29.14	29.34	28.87	70.9	85.6	89.8	68.1	79.0	96	56	64	65	80	52	.611	.637	2.92	1.13	.0	4.4	4.5	4.3	4.3	4.3	4.3	4.3	4.3
August	29.17	29.34	28.98	72.4	86.9	91.8	70.7	81.2	98	62	66	68	81	54	.650	.687	1.98	1.23	.0	3.9	4.9	4.7	4.7	4.7	4.7	4.7	4.7
September	29.22	29.51	28.91	59.6	77.6	81.8	58.0	69.9	97	41	52	53	76	45	.416	.443	1.92	1.32	.0	3.5	4.0	4.2	4.2	4.2	4.2	4.2	4.2
October	29.19	29.73	28.68	47.4	63.3	66.8	45.6	56.2	94	24	40	42	76	48	.268	.290	1.64	.49	.0	5.1	4.2	5.1	5.1	5.1	5.1	5.1	5.1
November	29.28	29.85	28.75	34.1	45.7	49.3	30.8	40.0	84	6	27	30	75	55	.160	.180	2.27	.70	2.1	3.9	4.9	5.1	5.1	5.1	5.1	5.1	5.1
December	29.30	29.66	28.94	28.7	34.0	37.9	25.1	31.5	58	5	25	26	85	73	.150	.152	1.78	1.14	.5	7.2	7.1	7.1	7.1	7.1	7.1	7.1	7.1
Year	29.19	29.85	28.38	47.4	59.1	63.6	44.5	54.1	99	-9	42	43	80	58	.326	.348	31.70	1.68	26.9	5.0	5.6	5.5	5.5	5.5	5.5	5.5	5.5

COLUMBIA, S. C.

[$\phi=34^{\circ}00' N.$; $\lambda=81^{\circ}03' W.$]

January	29.84	30.15	29.46	52.9	57.3	56.1	62.7	49.2	56.0	78	35	49	50	87	77	80	0.370	0.377	0.378	4.10	1.19	.0	8.1	8.5	7.8	8.5	8.5
February	29.69	30.13	29.11	41.7	51.4	50.8	57.2	39.4	48.3	76	25	32	31	68	48	49	.198	.198	.192	4.33	2.36	.0	5.5	5.3	4.5	5.0	5.0
March	29.64	30.11	29.33	45.0	59.3	59.0	65.0	43.4	54.2	77	29	37	36	77	43	46	.234	.221	.233	2.50	1.05	T	3.5	4.2	3.1	4.0	4.0
April	29.62	30.07	29.23	54.9	67.9	66.9	73.2	51.7	62.4	89	35	48	48	74	53	56	.348	.355	.362	6.48	1.67	.0	3.8	4.2	3.8	4.0	4.0
May	29.64	29.93	29.43	64.3	78.7	76.4	84.2	61.2	72.7	95	50	56	55	74	45	50	.458	.444	.451	3.29	2.12	.0	2.9	2.2	3.1	2.8	2.8
June	29.60	29.85	29.24	73.4	85.7	80.2	90.1	69.5	79.8	98	64	67	66	66	81	53	.663	.634	.654	6.20	2.88	.0	3.7	5.5	6.5	5.2	5.2
July	29.65	29.85	29.44	73.7	86.1	81.4	90.5	70.5	80.5	100	62	68	68	68	84	56	.667	.683	.698	4.79	2.57	.0	4.3	4.5	4.9	4.8	4.8
August	29.71	29.94	29.44	74.0	84.6	79.6	88.0	70.9	79.4	93	65	70	70	70	87	62	.731	.726	.731	6.30	1.43	.0	4.5	4.7	5.7	5.3	5.3
September	29.69	30.03	29.34	65.5	79.1	74.2	82.4	63.4	72.9	92	52	60	59	61	81	52	.526	.529	.555	1.27	.75	.0	4.7	4.3	3.8	4.3	4.3
October	29.68	30.14	29.21	55.0	68.3	64.1	71.4	52.5	62.0	89	33	48	48	50	77	51	.364	.373	.390	2.28	1.17	.0	5.1	4.4	4.1	4.5	4.5
November	29.75	30.32	29.23	44.1	58.1	54.6	61.6	41.4	51.5	76	21	37	37	38	75	49	.238	.249	.255	2.10	1.13	.0	3.9	3.6	3.3	3.7	3.7
December	29.80	30.18	29.34	38.5	50.4	48.0	54.9	35.9	45.4	71	15	32	32	34	76	52	.190	.201	.217	2.01	1.18	.0	4.8	5.2	3.4	5.0	5.0
Year	29.69	30.32	29.11	56.9	68.9	65.9	73.4	54.1	63.8	100	15	50	50	51	78	53	.418	.416	.426	45.65	2.88	T	4.6	4.7	4.5	4.8	4.8

COLUMBUS, OHIO

[$\phi=39^{\circ}58' N.$; $\lambda=83^{\circ}00' W.$]

January	29.28	29.75	28.73	34.9	38.9	39.2	45.5	30.2	37.8	66	17	31	32	32	83	75	76	0.182	0.189	0.198	10.71	2.16	4.2	8.6	7.7	7.9	8.2
February	29.14	29.69	28.38	28.8	35.1	33.7	40.1	24.5	32.3	72	10	22	25	25	75	68	70	.127	.148	.144	.87	.17	1.3	7.8	7.3	6.1	7.3
March	29.16	29.53	28.53	31.3	39.9	39.4	44.8	28.4	36.6	66	15	26	28	29	78	61	66	.140	.158	.162	1.56	.62	2.3	5.2	6.1	6.4	5.8
April	29.07	29.57	28.56	45.4	55.5	54.7	60.7	41.5	51.1	82	31	37	40	40	73	57	60	.226	.260	.260	3.16	.84	T	5.8	7.0	6.5	6.4
May	29.13	29.39	28.86	57.6	67.7	66.2	72.5	52.5	62.5	92	40	48	48	50	70	53	60	.346	.359	.382	3.28	1.04	.0	4.6	5.6	5.2	5.2
June	29.09	29.40	28.79	67.1	76.7	75.1	80.4	62.9	71.6	90	52	60	60	60	78	57	60	.518	.524	.524	6.71	2.06	.0	6.0	7.2	6.0	6.1
July	29.13	29.34	28.91	70.0	81.6	78.5	85.2	65.0	75.1	94	54	62	60	61	76	49	58	.565	.535	.556	3.91	1.63	.0	3.6	3.9	4.8	4.1
August	29.19	29.42	28.98	70.3	82.8	79.4	86.0	67.1	76.6	94	60	64	64	64	82	54	63	.606	.601	.615	2.89	1.48	.0	5.0	5.3	4.5	4.3
September	29.22	29.56	28.82	57.3	71.7	68.2	75.9	54.0	65.0	91	41	51	49	49	79	46	53	.995	.383	.382	2.45	1.66	.0	3.4	3.8	2.8	3.4
October	29.17	29.65	28.56	47.0	57.1	53.7	60.9	44.4	52.6	85	31	41	41	41	79	57	63	.277	.287	.287	2.41	1.29	T	5.6	6.4	5.4	6.1
November	29.22	29.81	28.54	36.6	43.8	41.8	47.9	32.5	40.2	86	16	30	32	32	78	64	68	.178	.184	.188	1.02	2.6	2.4	6.6	6.8	5.6	6.9
December	29.26	29.70	28.66	28.0	32.0	32.9	36.5	25.5	31.0	52	7	23	25	26	80	74	76	.132	.144	.154	3.00	1.55	1.9	6.7	6.9	6.7	7.2
Year	20.17	29.81	28.38	47.9	56.9	55.2	61.4	44.0	52.7	94	7	41	42	42	78	60	64	.308	.314	.321	41.97	2.16	12.1	5.7	6.2	5.7	5.9

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

CLEVELAND, OHIO

[H=651 ft.; H_b=762 ft.; h_t=267 ft.; h_r=264 ft.; h_a=318 ft.]

Month	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Number of days																
														Precipitation				Snow		Fog		Maximum temp.		32° or below		32° or above		Minimum temperature or below		Thunderstorm
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora	
January	16.5	SE.	43	SE.	13	5	4	3	13	9	10	12	6	0	3	5	23	17	15	11	7	0	6	0	0	6	0	27	0	0
February	17.8	W.	53	W.	10	4	4	1	4	12	12	13	6	0	1	7	20	13	7	16	10	1	0	0	0	10	0	23	2	0
March	15.6	NW.	41	NW.	8	11	6	3	3	1	12	12	14	0	8	6	17	17	11	18	15	1	4	0	0	10	0	29	1	0
April	16.4	SE.	43	SW.	10	3	9	3	14	8	7	11	5	0	5	10	15	14	10	4	2	0	2	0	0	0	4	2	2	
May	11.6	S.	53	NW.	4	11	10	5	6	12	6	5	8	10	13	9	9	13	10	0	0	0	2	0	0	0	0	5	0	0
June	11.5	NW.	38	SW.	2	13	10	2	7	5	5	8	10	0	8	11	11	14	13	0	0	0	0	0	0	0	0	11	0	0
July	11.6	S.	56	W.	7	8	10	2	3	17	10	7	4	1	11	14	6	11	8	0	0	0	1	0	0	0	0	10	0	0
August	10.3	NE.	29	NE.	0	6	16	4	14	11	6	4	1	0	14	10	7	6	5	0	0	0	4	0	0	4	0	6	2	0
September	13.9	S.	37	NW.	3	3	7	4	14	14	5	2	11	0	9	14	7	5	4	0	0	0	0	0	0	0	0	1	0	0
October	17.3	NW.	43	W.	10	5	3	1	11	12	12	6	12	0	4	7	20	12	8	3	2	0	1	0	0	0	1	1	0	0
November	18.2	SW.	54	SW.	10	0	1	2	5	14	26	5	7	0	8	4	18	16	12	11	8	0	1	0	4	0	12	1	0	0
December	14.8	SW.	37	SW.	4	3	0	4	10	10	18	10	7	0	4	5	22	16	9	15	8	0	5	0	10	0	25	0	0	0
Year	14.6	SW.	56	W.	81	72	80	34	104	125	129	96	88	2	88	102	175	154	112	78	52	2	26	0	40	4	121	40	4	4

COLUMBIA, MO.

[H=733 ft.; H_b=784 ft.; h_t=6 ft.; h_r=3 ft.; h_a=66 ft.]

January.....	9.0	SE.	27	SW.	0	3	3	2	7	4	2	4	6	0	10	3	18	11	10	7	4	0	2	4	13	0	30	2	0
February.....	10.0	NW.	34	NW.	1	1	2	0	4	3	5	4	9	0	9	9	10	6	6	9	4	0	0	1	7	0	24	1	0
March.....	8.6	N.	27	N.	0	7	1	4	1	6	6	2	4	0	9	8	14	9	6	6	2	0	0	0	4	0	19	1	0
April.....	9.9	NW.	32	SE.	1	2	0	4	6	4	4	6	0	6	9	15	13	12	1	0	1	2	1	0	0	2	6	0	0
May.....	7.4	S.	22	NW.	0	3	2	4	8	5	6	0	3	0	8	15	8	10	10	0	0	0	1	0	0	1	0	9	0
June.....	6.9	S.	24	NE.	0	3	4	6	1	7	7	2	0	0	12	8	10	13	9	0	0	0	0	0	0	7	0	7	0
July.....	6.4	E.	27	NE.	0	1	2	7	8	9	1	0	3	0	11	18	2	9	9	0	0	0	0	0	0	17	0	10	0
August.....	6.7	SE.	28	N.	0	3	3	8	7	7	3	2	0	1	0	13	12	6	7	5	0	0	0	0	0	22	0	7	0
September.....	7.3	E.	21	NW.	0	4	3	9	7	3	3	0	1	0	14	11	5	4	4	0	0	0	0	0	0	6	0	3	0
October.....	7.6	N.	25	NW.	0	7	0	6	4	6	3	1	4	0	12	8	11	8	8	0	0	1	2	1	0	1	4	3	1
November.....	8.5	NW.	25	NW.	0	2	2	2	4	7	2	4	7	0	11	12	7	5	5	6	2	1	0	0	3	0	15	3	0
December.....	8.3	W.	23	NW.	0	3	1	3	5	3	8	4	4	0	6	6	19	9	7	6	1	0	9	3	7	0	26	0	0
Year.....	8.0	S.	34	NW.	2	39	23	55	62	64	49	25	48	0	121	119	125	104	91	35	13	3	16	10	34	54	120	52	1

COLUMBIA, S. C.

[H=332 ft.; H_b=347 ft.; h_t=70 ft.; h_r=68 ft.; h_a=91 ft.]

January.....	9.0	NE.	25	SW.	0	7	29	4	2	12	5	3	0	0	0	8	23	21	16	0	0	0	17	14	0	0	0	0	0
February.....	9.4	NE.	27	SW.	0	9	9	7	4	10	8	7	2	0	11	5	12	12	8	0	0	0	5	4	0	0	5	1	0
March.....	8.5	NW.	29	SW.	0	7	6	2	7	7	13	4	16	0	17	4	10	9	7	1	0	0	1	1	0	0	4	1	0
April.....	9.1	S.	26	SW.	0	7	7	5	5	10	14	4	8	0	16	6	8	8	0	0	0	3	0	0	0	0	6	0	0
May.....	8.0	S.	38	SW.	1	4	14	6	8	14	5	5	5	1	20	9	2	6	5	0	0	0	0	0	0	4	0	5	0
June.....	7.7	S.	27	SW.	0	4	6	3	6	21	11	4	5	0	6	21	3	13	11	0	0	0	2	0	0	17	0	17	0
July.....	6.9	S.	24	W.	0	5	6	3	11	14	13	4	6	0	10	17	4	7	5	0	0	0	3	0	0	13	0	11	0
August.....	6.9	S.	25	SE.	0	7	10	6	11	20	8	0	0	0	10	9	12	17	15	0	0	0	3	1	0	10	0	17	0
September.....	7.6	NE.	20	NE.	0	11	22	4	6	8	5	1	3	0	15	8	7	4	3	0	0	5	1	0	3	0	2	0	0
October.....	9.0	NE.	26	SW.	0	7	18	4	1	8	9	9	6	0	15	7	9	11	10	0	0	0	3	0	0	0	0	0	0
November.....	8.2	NE.	27	NE.	0	12	19	3	2	7	2	6	9	0	18	3	9	7	5	0	0	0	2	0	0	0	5	0	0
December.....	7.4	NE.	21	SW.	0	11	13	1	2	10	8	8	9	0	13	7	11	6	5	0	0	0	6	2	0	0	9	0	0
Year.....	8.1	S.	38	SW.	1	91	159	48	65	141	101	55	69	1	151	104	110	122	98	1	0	0	50	23	0	47	23	60	0

COLUMBUS, OHIO

[H=724 ft.; H_b=822 ft.; h_t=90 ft.; h_r=88 ft.; h_a=110 ft.]

January.....	10.6	S.	37	S.	3	11	9	6	5	16	7	6	2	0	3	6	22	15	13	3	2	0	7	0	3	0	23	0	0
February.....	12.3	S.	43	SW.	4	6	3	3	5	16	9	3	11	0	4	8	16	12	8	16	5	1	1	0	7	0	24	1	0
March.....	9.8	N.	45	SW.	1	11	9	5	2	11	4	7	13	0	9	10	12	10	7	10	5	2	4	0	4	0	21	2	0
April.....	11.3	S.	37	S.	3	8	6	11	3	17	6	5	4	0	5	14	11	15	13	2	0	1	3	1	0	0	3	6	0
May.....	8.4	S.	34	W.	3	16	5	6	1	23	1	5	5	0	10	12	9	14	11	0	0	0	1	0	0	1	0	6	0
June.....	8.3	N.	42	SW.	2	19	7	2	1	16	5	7	3	0	6	13	11	12	11	0	0	0	1	0	0	1	0	10	0
July.....	7.7	S.	31	W.	0	8	6	7	2	27	3	6	2	1	14	11	6	11	10	0	0	0	0	0	0	9	0	13	0
August.....	6.9	S.	33	W.	1	18	8	8	4	16	3	3	2	0	14	12	5	10	6	0	0	0	1	0	0	5	0	7	0
September.....	7.6	N.	28	SW.	0	22	6	7	3	13	3	3	3	0	17	7	6	6	0	0	0	0	0	0	0	3	0	2	0
October.....	10.4	S.	43	SW.	1	17	3	6	4	20	3	2	7	0	7	11	13	10	8	2	0	0	1	1	0	0	3	1	0
November.....	10.1	S.	42	SW.	2	3	3	4	3	21	8	15	3	0	7	16	12	9	9	5	0	0	3	0	2	0	13	0	0
December.....	9.4	S.	38	SW.	1	8	4	3	3	20	11	7	5	1	7	5	19	15	9	10	4	0	9	1	9	0	21	0	0
Year.....	9.4	S.	45	SW.	21	147	69	68	36	216	63	69	60	2	103	116	146	143	111	52	21	4	31	3	25	19	108	48	0

TABLE 15.—*Annual meteorological summaries for the year ended Dec. 31, 1937*—Continued

CONCORDIA, KANS.

[$\phi=39^{\circ}35'$ N.; $\lambda=97^{\circ}41'$ W.]

Month	Pressure			Temperature									Moisture														
	Extremes			Mean						Extremes			Dew point	Relative humidity	Vapor pressure	Precipitation			Cloudiness								
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight			
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>					
January	28.59	29.04	27.96	12.9	17.7	18.5	24.7	8.5	16.6	46	-7	10	12	15	88	77	85	0.073	0.080	0.091	1.76	1.27	3.2	4.4	4.9	5.5	5.2
February	28.54	29.25	27.64	21.6	30.8	31.5	35.8	21.0	28.4	52	4	20	21	23	82	66	71	.110	.115	.125	.32	.16	3.7	5.4	5.3	4.7	6.1
March	28.59	28.94	27.53	34.6	42.1	42.8	47.4	29.6	38.5	69	15	27	30	31	84	62	64	.151	.168	.181	2.21	.93	.7	5.7	6.5	5.9	6.5
April	28.40	28.82	27.85	44.4	58.2	59.1	63.2	42.3	52.8	89	24	35	35	36	71	46	45	.210	.218	.221	.46	.40	.0	5.4	6.8	5.5	5.8
May	28.46	28.82	28.13	56.5	71.9	72.7	77.3	54.5	65.9	92	37	51	51	52	82	50	50	.385	.393	.406	1.85	.52	.0	6.1	6.3	4.7	5.5
June	28.46	28.75	28.07	66.2	80.3	81.5	85.1	63.2	74.2	106	49	58	56	55	77	47	46	.498	.455	.447	2.28	.94	.0	4.8	4.8	5.1	4.8
July	28.47	28.71	28.16	71.9	88.8	90.9	94.0	69.5	81.8	108	59	63	60	59	75	41	37	.586	.527	.507	4.06	1.54	.0	4.0	3.5	3.1	3.6
August	28.48	28.74	28.22	73.7	91.9	92.0	96.4	71.6	84.0	107	61	63	62	59	72	38	35	.588	.561	.510	1.98	.86	.0	3.1	3.6	3.4	3.4
September	28.56	28.98	28.31	60.7	78.5	77.7	83.1	60.0	71.6	101	44	52	51	50	73	42	41	.413	.411	.392	1.64	.82	.0	3.4	4.1	3.4	3.9
October	28.56	29.09	28.05	46.9	61.5	59.7	67.3	44.2	55.8	87	29	39	40	40	75	48	51	.247	.263	.256	1.58	1.23	.0	4.5	4.2	3.9	4.2
November	28.63	29.13	28.01	32.2	45.2	42.9	49.8	29.5	39.2	77	10	25	25	27	76	48	54	.145	.140	.156	.20	.09	1.0	3.6	5.5	4.4	4.5
December	28.64	29.04	28.18	24.2	33.9	33.8	39.4	20.9	30.2	57	-2	20	22	23	82	62	64	.115	.127	.132	.14	.09	1.6	4.4	5.6	4.2	4.9
Year	28.53	29.25	27.53	45.5	58.4	58.6	63.6	42.9	53.2	108	-7	39	39	39	78	52	54	.293	.288	.285	18.48	1.54	10.2	4.6	5.1	4.5	4.8

CORPUS CHRISTI, TEX.

[$\phi = 27^{\circ}49'$ N.; $\lambda = 97^{\circ}25'$ W.]

January	29.97	30.42	29.57	54.0	59.5	57.8	63.7	50.8	57.2	80	33	51	53	53	91	80	85	0.410	0.435	0.433	0.42	0.09	.0	7.1	8.9	9.2	9.4
February	30.03	30.54	29.53	54.4	63.3	61.3	67.4	52.5	60.0	87	36	48	50	51	82	64	73	.370	.391	.406	.58	.39	.0	6.6	7.1	6.9	7.7
March	29.99	30.36	29.58	58.4	64.9	62.8	68.3	55.9	62.1	86	40	54	53	54	85	68	76	.440	.432	.464	2.05	1.58	.0	7.3	7.1	7.4	7.2
April	29.88	30.27	29.48	65.3	74.2	72.5	77.2	64.0	70.6	87	48	60	61	63	85	66	75	.552	.569	.601	.43	.40	.0	6.8	5.9	4.7	5.5
May	29.91	30.16	29.65	72.8	80.5	78.1	82.1	71.7	76.9	90	62	68	68	68	86	65	73	.698	.683	.702	1.19	1.11	.0	4.5	4.3	4.6	4.1
June	29.89	30.12	29.57	72.0	86.7	83.6	88.5	77.7	83.1	93	65	74	74	75	86	66	75	.852	.838	.860	.82	.82	.0	4.5	4.1	3.3	3.5
July	29.95	30.08	29.84	78.5	85.8	84.0	88.5	77.0	82.8	93	67	74	73	74	87	67	73	.847	.820	.846	2.07	1.12	.0	4.3	4.0	4.3	4.2
August	29.92	30.13	29.74	79.3	88.6	85.6	90.5	78.7	84.6	93	75	76	74	75	88	63	71	.882	.847	.873	1.66	.90	.0	3.2	3.9	3.7	3.5
September	29.94	30.17	29.80	76.9	86.8	83.2	88.6	76.3	82.4	93	68	70	70	70	80	59	66	.748	.751	.748	.57	.22	.0	3.6	3.4	3.4	3.3
October	29.95	30.21	29.61	69.1	81.2	77.0	83.2	67.8	75.5	94	54	63	64	66	81	58	70	.595	.613	.657	2.04	1.32	.0	2.8	2.6	2.0	2.5
November	30.06	30.51	29.67	58.1	67.8	65.0	71.2	55.4	63.3	86	35	53	54	55	83	64	72	.444	.470	.477	4.09	1.89	.0	3.1	5.1	4.0	4.6
December	30.07	30.37	29.71	55.3	59.5	58.3	63.1	52.2	57.6	74	37	52	53	54	91	81	86	.420	.435	.435	8.13	3.83	.0	6.1	7.8	6.9	7.7
Year	29.96	30.54	29.48	66.8	74.9	72.4	77.7	65.0	71.3	94	33	62	62	63	85	67	75	.605	.607	.624	24.05	3.83	.0	5.0	5.4	5.0	5.2

DALLAS, TEX.

[$\phi=32^{\circ}46'$ N.; $\lambda=96^{\circ}47'$ W.]

January	29.50	29.93	29.07	38.2	41.7	43.8	49.5	34.2	41.8	68	19	35	36	38	91	83	80	0.222	0.232	0.248	1.50	0.54	2.0	8.8	8.5	8.6	4.8	8.5
February	29.51	30.01	28.88	43.0	52.3	53.8	59.2	38.9	49.0	80	25	34	32	32	72	50	47	.221	.199	.199	.28	.21	T	5.3	5.5	4.5	4.4	4.6
March	29.51	29.84	28.94	45.7	53.9	56.1	59.1	43.3	51.2	74	28	38	40	41	76	63	61	.246	.266	.280	4.51	1.20	0.8	5.7	5.1	6.6	5.6	5.6
April	29.35	29.76	28.94	56.4	70.8	73.8	76.2	55.0	65.6	91	39	50	48	47	79	68	42	.384	.376	.347	.64	.62	.0	5.6	4.9	4.1	4.6	4.6
May	29.40	29.65	29.13	65.2	79.4	81.2	84.8	64.1	74.4	90	53	59	56	55	80	45	43	.512	.454	.446	.59	.24	.0	6.1	5.3	4.3	4.9	4.9
June	29.38	29.59	29.06	73.7	85.0	87.8	90.8	72.6	81.7	100	57	67	65	65	81	55	50	.667	.630	.624	4.65	2.27	.0	5.0	5.2	3.4	4.1	4.1
July	29.42	29.57	29.26	75.7	89.0	90.6	93.6	75.0	84.3	100	70	68	66	64	78	48	44	.679	.644	.612	2.22	.94	.0	4.6	4.7	5.1	4.4	4.4
August	29.41	29.65	29.23	77.0	90.7	91.0	95.1	76.0	85.6	103	70	69	67	65	78	47	45	.712	.658	.624	2.93	2.00	.0	4.3	4.2	4.0	4.0	4.0
September	29.45	29.72	29.27	68.9	83.6	83.7	88.4	67.8	78.1	98	53	60	59	59	76	45	45	.548	.522	.519	1.86	1.26	.0	3.5	3.4	3.5	3.7	3.7
October	29.65	29.80	28.99	58.3	71.9	73.0	76.8	56.9	66.8	94	37	49	49	50	73	48	47	.367	.369	.373	4.08	3.14	.0	3.9	3.6	2.6	3.5	3.5
November	29.57	30.07	29.04	47.3	55.9	56.4	60.9	43.9	52.4	82	23	40	39	40	77	56	56	.285	.267	.268	4.48	2.41	2.6	6.0	4.8	4.2	5.2	5.2
December	29.58	29.95	29.08	42.9	47.8	49.5	52.9	40.1	46.5	70	19	39	39	41	86	74	74	.269	.276	.286	5.40	1.99	.0	7.3	8.0	6.4	7.1	7.1
Year	29.48	30.07	28.88	57.7	68.5	70.1	73.9	55.6	64.8	103	19	51	50	50	79	55	53	.426	.408	.402	33.22	3.14	5.4	5.5	5.3	4.8	5.1	5.1

DAVENPORT, IOWA

[$\phi=41^{\circ}30'$ N.; $\lambda=90^{\circ}38'$ W.]

January	29.47	29.92	28.69	17.2	22.4	23.2	29.0	11.8	20.4	42	0	13	15	17	82	72	74	0.084	0.097	0.102	3.52	1.42	2.6	5.5	6.4	5.0	6.2
February	29.34	30.03	28.51	20.6	25.2	26.6	33.2	16.8	25.0	50	-1	15	16	19	77	66	70	0.096	0.098	0.110	1.61	1.31	3.9	5.8	5.5	5.4	5.0
March	29.45	29.76	28.80	29.2	37.7	38.2	42.3	27.6	35.0	64	15	24	26	80	58	62	133	116	151	2.06	0.88	7.7	5.2	5.6	6.4	5.9	
April	29.22	29.73	28.70	43.9	52.1	52.6	57.1	41.4	49.2	81	31	38	38	40	79	62	230	243	257	3.86	1.08	2	7.6	7.9	6.6	7.4	
May	29.32	29.58	28.94	56.2	67.5	68.3	72.8	54.5	63.6	91	44	49	50	51	79	57	366	389	399	3.91	1.00	0	5.8	5.9	5.6	6.0	
June	29.29	29.69	28.04	64.6	75.5	76.3	80.0	62.2	71.1	99	46	57	57	58	78	55	488	489	511	2.56	1.28	0	5.8	6.2	4.7	5.8	
July	29.32	29.51	29.03	69.7	82.9	84.3	88.0	67.7	77.8	97	57	61	60	61	75	47	549	534	547	4.99	2.33	0	4.6	4.2	4.1	4.3	
August	29.37	29.55	29.14	70.7	83.4	84.1	88.5	69.7	79.1	99	55	63	63	65	78	53	584	588	623	1.91	1.00	0	4.2	4.8	3.1	4.2	
September	29.41	29.69	29.00	57.8	72.5	71.4	77.6	65.0	66.8	94	40	50	48	50	75	44	390	372	389	2.06	0.71	0	3.8	4.1	3.6	3.9	
October	29.37	29.92	28.71	45.3	55.7	55.3	60.7	43.5	52.0	87	26	39	41	41	78	59	61	256	275	281	2.51	1.59	7	5.7	6.6	4.1	6.0
November	29.43	30.04	28.80	31.0	41.6	39.0	45.1	27.6	36.3	76	8	24	26	36	74	55	60	141	151	153	0.63	0.21	4.0	4.8	3.9	4.4	4.6
December	29.47	29.88	29.01	24.0	27.4	27.0	31.2	19.7	25.4	50	3	21	22	21	87	79	78	121	123	120	1.34	0.40	7.3	7.2	7.3	6.4	7.4
Year	29.37	30.04	28.51	44.2	53.7	53.9	58.8	41.5	50.1	99	-1	38	38	40	78	59	61	.287	.291	.304	30.96	2.33	25.7	5.5	5.7	5.0	5.0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

CONCORDIA, KANS.

[H=1,375 ft.; H_b=1,392 ft.; h_t=50 ft.; h_r=42 ft.; h_a=58 ft.]

Month	Wind														Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from—												Precipitation	Snow			Fog		Maximum temp.		32° or below	Elec- tricity				
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora		
January	9.0	N.	30	NW.	0	8	10	3	7	12	5	3	11	3	10	11	10	6	6	11	3	0	2	0	23	0	31	0	0		
February	9.3	N.	39	NW.	1	11	6	2	4	10	8	6	7	2	9	11	8	3	2	8	3	0	0	0	10	0	23	0	0		
March	9.3	N.	27	N.	0	14	7	5	11	7	7	5	4	2	9	8	14	8	7	8	2	0	2	0	5	0	19	2	0		
April	11.0	N.	36	NW.	2	10	7	4	9	8	5	4	13	0	6	14	10	4	2	0	0	0	0	0	0	0	3	0	0		
May	8.9	S.	23	S.	0	8	9	9	3	18	3	7	3	2	6	18	7	12	8	0	0	1	0	0	0	2	0	10	0	0	
June	8.6	S.	24	S.	0	7	5	6	8	13	8	7	5	1	15	6	9	10	7	0	0	0	1	0	0	11	0	7	0	0	
July	7.6	S.	28	NE.	0	3	2	9	18	15	6	3	4	2	17	12	2	10	7	0	0	1	0	0	0	21	0	12	0	0	
August	8.5	S.	29	NW.	0	0	5	3	11	27	7	1	2	6	15	14	2	7	6	0	0	0	1	0	0	25	0	9	0	0	
September	8.4	S.	23	S.	0	7	7	6	10	16	8	2	2	2	15	11	4	7	4	0	0	0	2	1	0	8	0	6	0	0	
October	8.4	SE.	25	NW.	0	11	7	3	11	7	9	7	3	4	15	9	7	5	5	0	0	0	2	0	0	0	2	0	3	0	0
November	9.0	N.	29	S.	0	12	5	2	5	9	12	3	10	2	12	13	5	3	3	9	2	0	1	0	6	0	16	2	0	0	0
December	8.3	N.	25	N.	0	15	5	1	2	7	17	2	13	0	13	11	7	4	1	2	2	0	2	1	9	0	28	0	0	0	0
Year	8.9	S.	39	NW.	3	106	75	53	99	149	95	50	77	26	142	138	85	79	58	38	12	2	13	2	53	67	122	48	3	0	0

CORPUS CHRISTI, TEX.

[H=19 ft.; H_b=20 ft.; h_t=11 ft.; h_r=63 ft.; h_a=78 ft.]

January	11.2	N.	35	S.	2	26	10	10	6	9	1	0	0	0	0	0	31	12	6	0	0	0	15	13	0	0	0	0	0	0
February	11.3	N.	31	N.	0	16	6	7	9	10	2	3	2	1	3	11	14	4	2	0	0	0	8	6	0	0	0	0	0	0
March	12.7	N.	42	N.E.	2	13	12	10	14	11	0	1	1	0	3	12	16	6	4	0	0	0	8	1	0	0	0	0	2	0
April	12.5	SE.	32	N.	1	6	2	6	22	20	1	2	1	0	7	16	7	2	1	0	0	0	4	2	0	0	0	0	2	0
May	13.2	SE.	30	SE.	0	3	2	2	34	17	3	0	1	0	16	9	6	4	2	0	0	0	0	0	0	0	0	0	2	0
June	12.6	SE.	37	N.	1	0	0	5	27	22	4	2	0	0	16	10	4	1	1	0	0	0	0	0	0	9	0	1	0	0
July	12.1	S.	31	SE.	0	1	1	1	28	24	6	1	0	0	16	8	7	11	8	0	0	0	0	0	0	8	0	5	0	0
August	10.6	SE.	29	SE.	0	0	0	1	30	19	8	4	0	0	17	12	2	2	2	0	0	0	0	0	0	26	0	3	0	0
September	9.9	E.	28	N.E.	0	6	8	16	12	8	6	2	2	0	18	6	6	7	4	0	0	0	0	0	0	10	0	3	0	0
October	10.6	S.	27	N.	0	12	7	5	15	15	5	2	1	0	23	3	5	6	6	0	0	0	1	0	0	4	0	3	0	0
November	10.7	S.	31	N.	0	14	6	7	12	14	1	1	5	0	13	8	9	9	7	0	0	1	3	0	0	0	0	4	0	0
December	10.6	SE.	32	N.	1	6	15	5	17	6	1	6	6	0	5	3	23	10	8	0	0	0	16	9	0	0	0	2	0	0
Year	11.5	SE.	42	N.E.	7	103	69	75	226	175	38	24	19	1	137	98	130	74	51	0	0	1	55	31	0	57	0	27	0	0

DALLAS, TEX.

[H=460 ft.; H_b=512 ft.; h_t=220 ft.; h_r=194 ft.; h_a=227 ft.]

January	10.8	NW	31	W.	0	11	8	8	11	2	4	7	11	0	2	6	23	17	10	5	3	0	10	0	5	0	13	2	0	0	0
February	14.0	S.	47	S.	7	8	8	2	6	14	5	4	9	0	13	3	12	3	2	1	0	1	2	0	0	0	7	1	0	0	0
March	13.5	N.	37	SW	3	17	8	4	10	13	2	5	3	0	10	7	14	8	8	1	1	2	1	1	0	0	5	5	0	0	0
April	14.1	SE	43	W.	4	6	3	3	19	15	2	5	7	0	12	8	10	3	2	0	0	0	1	0	0	1	0	3	0	0	0
May	12.2	SE	45	W.	3	9	2	3	26	11	3	5	3	0	12	10	9	9	5	0	0	0	0	0	0	3	0	8	0	0	0
June	10.0	S.	42	E.	2	3	2	8	18	19	7	1	2	0	14	10	6	8	4	0	0	0	1	0	0	20	0	9	0	0	0
July	10.0	S.	38	W.	1	2	3	8	24	22	2	1	0	0	13	9	9	5	5	0	0	0	0	0	0	26	0	6	0	0	0
August	9.6	SE	42	NE	2	1	5	20	22	8	6	0	0	0	13	12	6	6	6	0	0	0	0	0	0	27	0	6	0	0	0
September	9.7	S.	40	SW	1	6	9	14	11	16	1	1	2	0	16	10	4	3	2	0	0	0	2	0	0	14	0	4	0	0	0
October	11.4	N.	37	NW	1	14	12	5	12	12	2	3	2	0	18	5	8	6	5	0	0	0	2	0	0	3	0	4	0	0	0
November	12.2	SE	40	W.	3	9	9	5	12	8	4	5	8	0	13	7	10	5	4	1	1	0	5	2	0	0	7	3	0	0	0
December	10.4	N.	32	NW	1	16	6	2	12	9	2	6	8	1	6	2	23	13	12	0	0	0	8	4	1	0	7	1	0	0	0
Year	11.5	S.	47	W.	28	102	75	82	183	149	40	43	55	1	142	89	134	86	65	8	5	3	32	7	6	94	39	52	0	0	0

DAVENPORT, IOWA

[H=579 ft.; H_b=606 ft.; h_t=66 ft.; h_r=60 ft.; h_a=161 ft.]

January	11.2	NW.	33	SW.	1	4	9	2	12	3	9	12	11	0	10	4	17	9	8	13	4	0	8	2	17	0	31	1	1	0
February	12.6	NW.	38	NW.	2	5	1	1	6	8	4	15	16	0	8	8	12	9	4	16	7	0	5	1	13	0	25	1	1	0
March	10.0	NE.	30	NE.	0	10	16	3	4	2	5	7	14	1	9	7	15	10	7	12	5	0	1	0	5	0	23	0	0	0
April	11.2	SE.	35	SW.	2	7	11	3	14	4	8	5	8	0	5	6	19	17	15	3	2	0	5	1	0	0	1	4	0	0
May	9.8	NE.	32	N.	1	5	14	4	10	8	8	6	7	0	7	10	14	12	8	0	0	0	6	1	0	1	0	12	2	0
June	9.5	NE.	32	SW.	2	9	13	4	7	8	8	6	5	0	7	13	10	9	8	0	0	0	4	0	0	4	0	8	1	0
July	7.5	SW.	37	W.	2	3	4	5	6	10	21	7	6	0	14	11	6	9	6	0	0	0	1	1	0	10	0	8	0	0
August	7.5	S.	19	SW.	0	8	5	9	8	18	8	5	1	0	15	10	6	8	6	0	0	0	4	0	0	15	0	6	0	0
September	9.2	SW.	25	NW.	0	4	10	8	4	13	12	1	8	0	15	12	3	6	6	0	0	0	1	0	0	4	0	4	0	0
October	9.2	NW.	30	NW.	0	13	2	6	8	5	7	8	13	0	9	9	13	7	5	1	0	0	9	2	0	0	3	0	1	0
November	11.0	NW.	32	SW.	1	1	3	2	2	3	17	11	21	0	16	4	10	6	5	7	2	0	0	0	9	0	18	2	0	0
December	10.1	W.	30	NW.	0	6	3	3	4	7	11	17	10	1	5	7	19	11	9	9	5	0	9	0	15	0	29	0	0	0
Year	9.9	SW.	38	NW.	11	75	91	50	85	89	118	100	120	2	120	101	144	113	87	61	25	0	53	8	59	34	130	46	5	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

DAYTON, OHIO

[$\phi=39^{\circ}46' N.$; $\lambda=84^{\circ}12' W.$]

Month	Pressure			Temperature								Moisture													
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight	
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°
January	29.15	29.61	28.60	34.6	37.0	38.2	45.1	29.4	37.2	64	13	30	31	84	78	0.181	0.185	12.41	2.58	4.4	8.8	7.9	8.4		
February	29.04	29.62	28.33	29.1	33.7	33.3	39.4	25.0	32.2	71	10	23	24	78	67	.135	.140	1.71	.56	.9	6.8	7.1	6.6		
March	29.07	29.44	28.44	31.0	38.5	39.5	45.5	28.9	37.2	66	14	26	26	81	62	.145	.147	1.60	.45	4.8	5.2	5.9	6.1		
April	28.98	29.47	28.45	45.5	54.3	54.1	60.8	42.1	51.4	82	30	37	40	73	59	.233	.260	4.78	1.76	T	6.9	6.9	6.9		
May	29.05	29.27	28.76	57.0	66.1	66.6	71.4	53.0	62.2	93	41	49	50	76	58	.361	.381	3.66	1.04	.0	6.3	5.7	6.0		
June	29.01	29.34	28.72	66.6	75.1	74.3	80.1	63.1	71.6	90	52	60	60	80	61	.531	.536	4.80	1.42	.0	6.1	6.3	5.9		
July	29.05	29.25	28.82	68.8	80.4	79.0	85.0	64.6	74.8	92	52	62	62	80	55	.568	.578	3.39	1.41	.0	3.6	3.5	4.1		
August	29.11	29.34	28.88	69.3	80.8	79.5	86.2	66.8	76.5	94	61	65	66	86	62	.614	.638	4.92	3.03	.0	4.6	4.7	4.3		
September	29.13	29.46	28.75	56.6	69.9	67.7	75.3	54.3	64.8	92	41	51	51	82	54	.397	.408	3.44	2.24	.0	4.1	3.7	3.4		
October	29.06	29.55	28.43	47.2	55.6	54.4	61.2	44.6	52.9	85	30	41	41	80	60	.283	.287	4.06	1.67	T	5.5	5.8	6.0		
November	29.13	29.74	28.45	36.3	41.9	41.6	47.9	32.5	40.2	67	17	29	29	77	62	.176	.170	1.83	.76	4.9	6.2	6.8	6.6		
December	29.17	29.62	28.65	27.8	31.1	32.5	36.0	24.9	30.4	52	8	23	24	82	74	.132	.139	3.49	1.78	6.7	7.6	7.5	7.2		
Year	29.08	29.74	28.33	47.5	55.4	55.1	61.2	44.1	52.6	94	8	41	42	80	63	.313	.322	50.09	3.03	21.7	6.0	6.0	6.0		

DEL RIO, TEX.

[$\phi=29^{\circ}20' N.$; $\lambda=100^{\circ}53' W.$]

January	28.97	29.47	28.57	45.2	53.8	56.6	60.9	41.4	51.2	79	24	41	44	43	86	72	64	0.282	0.308	0.299	0.21	0.08	0.0	7.0	8.4	8.2	8.1
February	29.02	29.48	28.46	48.2	61.8	65.2	69.5	45.0	57.2	93	32	38	37	34	70	43	36	.244	.230	.206	.18	.10	.0	4.5	5.9	5.9	5.5
March	28.98	29.35	28.50	51.1	62.6	66.9	69.7	49.0	59.4	92	35	42	42	40	75	51	42	.302	.285	.270	.92	.69	.0	6.9	6.4	6.7	6.5
April	28.85	29.26	28.45	60.0	77.7	82.6	85.1	58.7	71.9	99	43	50	48	42	71	38	28	.395	.369	.301	.18	.18	.0	4.8	3.6	3.8	3.9
May	28.86	29.18	28.55	68.3	81.9	86.5	88.7	67.6	78.2	97	59	61	61	57	79	52	39	.558	.553	.479	.26	.13	.0	5.9	4.8	5.5	5.1
June	28.86	29.09	28.56	75.3	88.9	92.7	95.1	74.9	85.0	102	69	68	66	62	79	48	37	.690	.636	.556	.44	.28	.0	5.3	3.9	4.4	4.2
July	28.92	29.11	28.77	76.1	89.4	92.9	94.9	75.3	85.1	103	66	68	65	61	77	47	37	.685	.629	.543	.88	.41	.0	4.1	4.4	4.3	4.2
August	28.89	29.09	28.69	78.1	92.6	95.4	98.2	77.5	87.8	102	75	68	64	59	73	40	32	.695	.607	.511	.03	.03	.0	3.3	3.7	4.2	3.5
September	28.94	29.22	28.71	72.5	86.6	88.3	91.2	71.4	81.3	100	58	63	61	58	74	44	38	.595	.552	.495	.41	.35	.0	4.4	4.5	4.3	4.3
October	28.96	29.32	28.58	62.6	78.5	80.5	84.1	61.0	72.6	97	50	53	54	51	72	46	40	.426	.435	.392	1.49	.78	.0	2.8	2.8	2.5	2.7
November	29.06	29.58	28.65	50.4	63.3	64.7	68.4	48.6	58.5	86	27	44	44	44	80	53	49	.328	.332	.320	1.84	1.71	.0	5.1	4.2	3.4	4.0
December	29.08	29.44	28.72	46.8	52.7	53.3	56.8	44.7	50.8	70	32	44	45	46	92	79	79	.310	.322	.332	3.93	1.42	.0	7.5	7.3	6.7	7.3
Year	28.95	29.58	28.45	61.2	74.2	77.1	80.2	59.6	69.9	103	24	53	53	50	77	51	43	.459	.438	.392	10.77	1.71	.0	5.1	5.0	5.0	5.0

DENVER, COLO.

[$\phi=39^{\circ}45' N.$; $\lambda=105^{\circ}00' W.$]

January	24.53	24.95	24.17	13.0	24.8	22.7	28.8	7.6	18.2	49	-12	3	6	7	66	48	54	0.048	0.056	0.060	0.29	0.15	6.0	1.8	3.4	3.5	3.5
February	24.60	24.99	23.84	27.1	40.7	40.3	45.0	21.9	33.4	66	4	11	14	15	54	40	40	.074	.087	.087	.58	.41	11.7	3.9	5.2	5.0	5.0
March	24.67	25.06	24.04	30.2	42.8	43.7	47.3	27.3	37.3	65	14	21	21	20	68	48	44	.111	.111	.107	.69	.14	6.6	5.4	6.4	7.7	6.9
April	24.61	25.00	24.08	38.5	53.8	56.1	59.2	35.4	47.3	82	26	26	22	22	64	34	31	.140	.120	.118	1.43	.51	12.8	5.0	6.0	6.5	5.7
May	24.72	25.09	24.30	49.2	65.6	66.4	70.9	47.2	59.0	84	36	36	33	35	62	35	37	.213	.193	.212	1.46	.74	.0	5.7	5.8	6.9	6.3
June	24.76	24.99	24.42	55.5	71.2	72.5	76.6	52.8	64.7	95	34	44	42	44	69	41	42	.299	.280	.299	2.39	1.12	T	5.0	5.2	6.7	5.3
July	24.82	25.03	24.68	63.3	83.9	81.8	87.3	62.2	74.8	96	57	48	44	47	60	27	33	.343	.295	.327	.95	.58	.0	2.8	3.6	6.9	4.3
August	24.82	25.02	24.61	65.0	84.6	83.2	89.8	63.8	76.8	97	56	47	42	44	53	25	30	.326	.270	.302	.63	.29	.0	1.9	3.3	5.8	4.1
September	24.82	25.18	24.61	55.7	74.0	73.6	78.7	53.5	66.1	90	35	40	40	38	58	32	31	.259	.256	.247	.56	.21	T	2.9	3.2	5.1	4.1
October	24.78	25.10	24.34	45.0	60.5	61.2	65.8	41.8	53.8	81	32	30	29	30	58	36	33	.172	.162	.165	.55	.31	.8	4.1	3.9	4.1	4.2
November	24.74	25.10	24.31	33.6	47.8	45.4	52.0	29.2	40.6	72	8	18	19	20	55	34	40	.099	.100	.108	.51	.31	4.9	3.5	4.6	4.8	4.8
December	24.71	25.11	24.20	27.1	39.6	35.3	45.1	22.5	33.8	68	-1	17	20	21	64	49	59	.093	.106	.111	.84	.46	9.0	5.0	6.1	5.8	6.1
Year	24.71	25.18	23.84	41.9	57.4	56.8	62.2	38.8	50.5	97	-12	28	28	29	61	37	40	.181	.169	.179	10.88	1.12	51.8	3.9	4.7	5.7	5.0

DES MOINES, IOWA

[$\phi=41^{\circ}35' N.$; $\lambda=93^{\circ}37' W.$]

January	29.20	29.62	28.47	11.1	17.6	16.6	24.2	5.1	14.6	41	-6	8	10	10	86	70	75	0.068	0.076	0.072	1.85	0.98	4.0	5.3	5.0	2.6	4.8
February	29.10	29.80	28.32	17.4	24.0	24.7	29.3	13.4	21.4	47	-5	14	16	18	84	70	76	.087	.095	.105	.80	.50	8.2	4.4	5.5	5.1	5.2
March	29.20	29.54	28.43	29.1	37.7	37.7	41.5	26.8	34.2	68	14	26	27	29	86	64	70	.141	.150	.166	1.99	.80	5.4	6.3	7.2	6.4	6.7
April	28.96	29.45	28.36	42.8	52.8	54.4	57.5	40.5	49.0	80	28	38	39	40	84	62	61	.238	.248	.253	3.29	.89	.6	6.6	7.7	6.9	7.1
May	29.05	29.30	28.70	56.2	68.8	69.5	73.2	53.5	63.4	88	43	51	52	52	83	57	57	.391	.406	.413	7.13	2.79	.0	5.4	6.2	5.2	5.7
June	29.04	29.40	28.61	63.5	76.8	78.1	80.7	60.8	70.8	100	47	58	58	59	82	54	54	.495	.506	.523	3.95	1.65	.0	6.6	6.5	5.0	6.0
July	29.06	29.26	28.74	69.3	84.8	85.7	88.8	66.5	77.6	96	57	62	64	63	79	50	49	.566	.593	.590	.58	.22	.0	3.9	4.7	4.8	4.6
August	29.09	29.30	28.80	69.7	85.5	86.3	89.4	68.1	78.8	101	60	65	67	67	85	56	54	.625	.669	.675	2.72	.88	.0	3.4	3.7	2.3	3.2
September	29.14	29.49	28.80	56.7	76.0	73.3	80.4	54.6	67.5	98	35	50	50	51	80	42	46	.388	.396	.396	1.41	.69	.0	3.3	3.7	3.3	3.3
October	29.23	29.79	28.61	44.5	58.6	55.9	62.7	41.8	52.2	89	21	38	39	40	79	51	57	.251	.265	.266	1.38	.61	.2	4.6	5.2	3.9	4.7
November	29.18	29.76	28.51	29.2	41.6	38.7	45.4	24.8	35.1	73	-1	21	24	25	70	51	58	.125	.145	.149	.65	.35	5.3	4.4	4.5	4.5	5.0
December	29.21	29.59	28.77	22.2	27.8	27.4	32.0	17.0	24.5	50	1	16	18	20	76	66	73	.101	.110	.119	.68	.27	4.1	6.9	7.2	5.0	6.9
Year	29.12	29.80	28.32	42.6	54.3	54.1	58.8	39.4	49.1	101	-6	37	39	40	81	58	61	.290	.305	.311	26.43	2.79	27.8	5.1	5.6	4.6	5.3

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

DAYTON, OHIO

[H=741 ft.; H_b=900 ft.; h_t=60 ft.; h_r=53 ft.; h_a=163 ft.]

Month	Wind													Number of days																	
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from											Precipitation	Snow			Fog		Maximum temperature		32° or below	32° or above	Thunderstorm	Electricity			
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature	32° or below	Thunderstorm	Aurora	
	Mi.	SW.	Mi.	SW.		(1)	(1)	(1)	1)	(1)	(1)	(1)	(1)	(1)																	
January	9.7	SW.	29	SW.	0	4	3	6	3	1	8	3	3	0	3	4	24	15	13	3	1	0	2	0	4	0	23	1	0	0	
February	11.5	SW.	41	W.	2	3	1	2	0	5	10	3	4	0	4	10	14	10	7	15	4	2	1	0	8	0	23	1	1	0	
March	9.1	NW.	34	W.	1	4	3	5	2	1	7	2	7	0	7	12	12	8	6	11	3	1	6	0	6	0	18	2	0	0	
April	10.1	SW.	31	W.	0	2	1	6	3	2	8	4	3	1	4	12	14	14	12	1	0	0	2	1	0	0	3	5	0	0	
May	7.4	SW.	34	W.	1	3	6	2	1	3	13	1	2	0	9	11	11	12	11	0	0	0	1	1	0	1	0	7	0	0	
June	7.3	N.	28	SW.	0	7	6	3	1	2	7	3	1	0	6	13	11	13	11	0	0	2	0	0	0	2	0	11	0	0	
July	6.8	SW.	31	W.	0	4	4	0	2	4	11	5	1	0	14	11	6	9	7	0	0	0	1	0	0	0	8	10	0	0	
August	6.0	SW.	24	NW.	0	5	12	0	1	4	6	1	0	2	14	8	9	9	7	0	0	1	3	0	0	7	0	8	1	0	
September	6.8	NE.	25	W.	0	5	8	6	0	2	6	2	1	0	17	11	2	4	4	0	0	0	0	0	0	2	0	3	0	0	
October	8.7	SW.	36	SW.	1	4	5	3	0	6	8	3	2	0	6	14	11	13	8	2	0	0	6	2	0	0	3	0	1	0	
November	9.4	W.	29	W.	0	0	2	3	1	4	11	8	1	0	6	10	14	11	7	9	4	0	5	1	3	0	12	0	0	0	
December	9.1	SW.	32	SW.	1	1	3	3	2	4	12	2	4	0	6	5	20	18	12	9	5	0	10	1	9	0	24	0	0	0	
Year	8.5	SW.	41	W.	6	42	54	39	16	38	107	37	29	3	96	121	148	136	105	50	17	6	37	6	30	18	106	48	3	0	

DEL RIO, TEX.

[H=957 ft.; H_b=960 ft.; h_t=63 ft.; h_r=56 ft.; h_a=71 ft.]

January	8.9	SE.	24	SE.	0	9	3	12	18	4	1	5	9	1	3	5	23	10	2	0	0	0	10	4	0	0	5	0	0	0
February	8.8	SE.	31	NW.	0	14	4	13	11	6	0	0	6	2	11	5	12	3	2	0	0	0	1	0	0	1	1	0	0	0
March	10.4	SE.	27	NW.	0	13	5	13	17	3	0	1	9	1	5	15	11	8	5	0	0	1	0	0	1	0	1	0	1	0
April	11.4	SE.	37	NW.	1	5	3	13	29	1	0	3	4	2	16	9	5	1	1	0	0	0	0	0	0	8	0	1	0	0
May	11.6	SE.	30	SE.	0	4	0	12	40	3	0	1	0	2	10	11	4	3	0	0	0	0	0	0	0	12	0	4	0	0
June	11.3	SE.	30	NE.	0	1	1	15	38	5	0	0	0	0	13	16	1	2	2	0	0	0	0	0	0	26	0	4	0	0
July	10.7	SE.	34	SE.	2	0	0	19	42	1	0	0	0	0	14	13	4	5	5	0	0	0	0	0	0	26	0	2	0	0
August	10.3	SE.	29	E.	0	0	0	29	28	3	2	0	0	0	17	12	2	1	0	0	0	0	0	0	0	31	0	2	0	0
September	9.1	SE.	24	F.	0	2	1	20	24	7	0	0	3	3	13	11	6	3	2	0	0	0	0	0	0	18	0	2	0	0
October	8.1	SE.	21	W.	0	7	1	17	18	4	2	1	5	7	22	2	7	6	0	0	0	0	0	0	0	11	0	4	0	0
November	8.9	SE.	30	NW.	0	11	0	14	19	0	2	3	11	0	16	6	8	4	2	0	0	0	0	0	0	3	1	0	0	0
December	7.7	NW.	24	NW.	0	4	1	11	12	2	0	15	12	5	7	3	21	18	10	0	0	0	6	2	0	0	1	3	0	0
Year	9.8	SE.	37	NW.	3	70	19	188	296	39	7	29	59	23	147	107	111	66	40	0	0	0	18	6	0	134	10	24	0	0

DENVER, COLO.

[H=5,220 ft.; H_b=5,292 ft.; h_t=106 ft.; h_r=98 ft.; h_a=113 ft.]

January	6.7	S.	28	NW.	0	18	8	0	2	16	8	5	5	0	16	12	3	6	2	10	6	0	5	1	15	0	31	0	0	0
February	9.4	S.	36	NW.	3	12	7	2	3	8	4	9	11	0	10	12	6	5	4	5	5	0	1	0	7	0	23	0	0	0
March	8.6	S.	35	NW.	2	13	13	4	4	15	2	2	9	0	4	11	16	10	7	14	10	2	0	5	0	20	1	0	0	0
April	8.7	S.	32	NW.	1	9	6	4	3	18	6	5	9	0	8	11	11	8	4	9	6	0	0	0	0	13	0	0	0	0
May	8.2	S.	30	NW.	0	6	7	4	5	20	2	9	9	0	7	10	14	7	7	0	0	1	0	0	0	0	5	0	0	0
June	7.9	S.	27	N.	0	9	8	1	7	21	3	5	5	1	11	11	8	9	8	2	0	0	3	0	0	6	0	9	0	0
July	7.6	S.	32	N.	1	8	4	1	1	27	7	5	9	0	13	14	4	7	4	0	0	0	0	0	0	8	0	14	0	0
August	7.6	S.	28	NW.	0	9	5	0	5	23	6	5	7	2	12	17	2	8	5	0	0	1	0	0	0	17	0	13	0	0
September	7.3	S.	31	N.	0	6	7	3	3	23	6	5	6	1	14	13	3	5	3	1	0	0	0	0	0	0	0	6	0	0
October	6.9	S.	32	N.	1	12	6	5	4	19	5	7	4	0	16	7	8	4	4	1	1	0	0	0	0	0	0	0	0	0
November	7.9	S.	35	W.	2	13	9	2	3	17	2	5	9	0	14	8	8	5	5	6	3	0	1	0	2	0	18	0	0	0
December	7.6	S.	28	W.	0	11	12	3	1	22	5	1	7	0	8	10	13	8	7	10	7	0	2	0	4	0	26	1	0	0
Year	7.9	S.	36	NW.	10	126	92	29	41	229	56	63	90	4	133	136	96	82	60	58	38	0	16	1	33	31	131	49	0	0

DES MOINES, IOWA

[H=800 ft.; H_b=872 ft.; h_t=5 ft.; h_r=3 ft.; h_a=99 ft.]

January	10.9	NW.	33	W.	1	5	1	7	12	6	3	8	19	1	12	10	9	10	8	16	7	0	3	2	21	0	31	0	0	0
February	11.7	NW.	38	NW.	3	6	0	5	5	9	4	9	18	0	10	6	12	8	3	13	5	0	5	2	17	0	26	0	0	0
March	9.9	N.	32	SE.	1	19	3	10	4	7	5	5	8	1	7	6	18	10	8	12	5	2	5	4	6	0	24	1	0	0
April	11.8	NW.	38	SE.	3	9	0	7	14	3	6	4	15	2	6	9	15	13	9	4	3	1	4	1	0	0	5	3	0	0
May	9.5	SE.	32	NW.	1	8	5	7	17	9	9	1	6	0	9	10	12	10	10	0	0	2	3	1	0	0	0	8	0	0
June	9.0	N.	30	W.	0	12	1	7	12	9	5	2	7	5	4	16	10	9	8	0	0	0	1	0	0	6	0	8	2	0
July	7.4	S.	25	NW.	0	11	1	6	13	18	4	2	5	2	11	13	7	6	4	0	0	0	0	0	0	15	0	6	0	0
August	7.9	SE.	25	NW.	0	5	2	12	28	8	2	0	3	2	19	8	4	11	11	0	0	0	3	0	0	18	0	13	0	0
September	8.7	S.	25	S.	0	8	2	11	11	16	2	1	9	0	18	9	3	4	3	0	0	1	4	2	0	6	0	4	0	0
October	9.0	NW.	25	NW.	0	8	0	2	16	6	8	6	15	1	15	5	11	8	6	2	1	0	5	0	0	0	5	0	1	0
November	10.6	NW.	30	NW.	0	8	0	3	7	13	6	7	16	0	12	9	9	5	3	8	3	0	0	0	0	9	0	19	2	0
December	10.0	NW.	33	W.	1	2	3	5	12	14	5	8	12	1	5	10	16	5	5	13	4	0	11	4	18	0	28	0	0	0
Year	9.7	SE.	38	NW.	10	101	18	82	151	118	59	53	133	15	128	111	126	99	78	68	28	6	44	16	71	45	138	45	3	0

1 Determined by 7:30 a. m. observation only

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

DETROIT, MICH.¹
[$\phi=42^{\circ}24' N.$; $\lambda=83^{\circ}00' W.$]

Month	Pressure			Temperature										Moisture												
	Extremes			Mean						Extremes		Dew point	Relative humidity	Vapor pressure			Precipitation			Cloudiness						
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight		
	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>		
January.....	29.46	30.02	28.75	27.5	31.4	31.0	37.6	21.8	29.7	58	3	24	24	25	84	74	78	0.132	0.138	0.147	3.64	0.73	4.4	7.5		
February.....	29.28	29.89	28.51	24.9	31.8	29.5	35.1	21.2	28.2	58	9	20	22	22	78	66	70	.109	.129	.122	1.64	.69	1.8	8.2		
March.....	29.34	29.73	28.89	26.4	34.5	32.3	38.0	24.0	31.0	54	11	21	22	22	78	60	65	.114	.120	.118	.59	.24	2.8	5.1		
April.....	29.26	29.71	28.68	40.0	48.6	47.0	53.1	36.5	44.8	68	26	34	34	36	79	60	66	.200	.204	.217	5.03	1.19	T	6.4		
May.....	29.31	29.63	29.03	54.0	64.3	61.9	67.9	47.9	57.9	92	35	46	46	47	75	54	61	.321	.328	.344	3.07	1.01	T	5.5		
June.....	29.27	29.63	28.97	64.2	72.3	69.5	75.8	58.4	67.1	87	46	55	56	56	73	58	64	.449	.475	.460	4.14	.86	.0	6.5		
July.....	29.30	29.48	28.95	68.6	79.3	75.7	82.5	63.2	72.8	95	50	61	60	60	77	52	60	.549	.530	.540	7.03	2.51	.0	5.0		
August.....	29.38	29.61	29.10	68.2	81.0	77.1	83.9	64.0	74.0	92	53	63	63	64	85	56	64	.590	.586	.596	2.51	.77	.0	4.0		
September.....	29.40	29.77	28.82	55.8	68.7	63.6	72.4	51.3	61.8	93	38	50	47	49	81	48	61	.384	.354	.375	1.80	1.23	.0	4.0		
October.....	29.33	29.91	28.61	44.7	53.1	50.0	56.6	40.9	48.8	85	27	40	38	39	83	59	66	.264	.253	.257	2.35	1.54	T	7.4		
November.....	29.35	29.91	28.58	35.2	42.7	38.9	45.4	31.5	38.4	64	19	29	30	30	78	62	69	.166	.175	.170	.97	.40	1.0	6.4		
December.....	29.41	29.94	28.95	24.5	29.0	27.2	31.5	21.2	26.4	43	7	20	22	22	83	74	79	.112	.120	.122	1.70	.58	6.1	7.4		
Year.....	29.34	30.02	28.51	44.5	53.1	50.3	56.6	40.2	48.4	95	3	39	39	39	80	60	67	.282	.284	.289	34.47	2.51	16.1	6.1		

DEVILS LAKE, N. DAK.

[$\phi=48^{\circ}7' N.$; $\lambda=98^{\circ}52' W.$]

January.....	28.48	28.95	27.39	-12.7	-6.1	-8.1	-0.5	-19.3	-9.9	31	-33	-16	-12	-12	85	73	80	0.020	0.025	0.023	0.47	0.10	6.3	4.8
February.....	28.34	28.94	27.81	0.0	11.6	8.0	13.5	-4.4	-4.6	35	-25	-1	6	7	94	89	93	.044	.063	.063	.46	.28	5.1	5.4
March.....	28.57	28.98	28.03	16.2	26.7	27.3	30.6	13.0	21.8	50	1	15	19	20	95	72	74	.088	.105	.109	.15	.06	1.8	5.6
April.....	28.35	28.77	27.94	31.5	42.6	43.5	47.3	29.3	38.3	63	15	30	32	33	93	69	68	.168	.186	.190	1.23	.42	2.8	6.4
May.....	28.38	28.90	27.85	46.8	61.7	62.6	67.3	43.8	55.6	93	24	42	41	42	84	52	50	.270	.269	.272	1.41	.53	.0	6.0
June.....	28.36	28.65	27.73	54.4	70.0	70.7	74.3	50.9	62.6	98	33	49	50	50	83	52	51	.360	.377	.383	3.50	1.67	.0	5.4
July.....	28.39	28.62	28.09	61.5	78.0	77.6	82.5	58.6	70.6	96	49	57	58	57	87	53	52	.478	.493	.477	3.26	1.26	.0	6.1
August.....	28.35	28.65	28.06	60.6	81.4	81.2	86.0	58.1	72.0	100	47	55	51	52	82	38	40	.440	.389	.413	1.25	.75	.0	3.5
September.....	28.44	28.80	28.02	45.9	64.1	63.7	69.4	43.5	56.4	91	32	42	44	42	91	51	49	.284	.303	.280	1.80	.59	.0	4.9
October.....	28.42	28.99	27.85	36.3	48.1	44.8	52.1	33.0	42.6	83	16	32	34	34	84	59	66	.187	.203	.202	.37	.26	T	6.3
November.....	28.44	28.92	27.80	18.6	28.0	24.5	31.2	13.4	22.3	62	-10	16	20	18	90	75	79	.100	.119	.110	.41	.28	3.1	5.9
December.....	28.46	28.96	27.87	5.0	11.2	9.2	16.9	-1.5	7.7	36	-20	3	8	7	90	86	90	.055	.066	.066	.48	.17	4.4	5.5
Year.....	28.42	28.99	27.39	30.3	43.1	42.1	47.6	26.5	37.0	100	-33	27	29	29	88	64	66	.308	.216	.216	14.79	1.67	23.5	5.5

DODGE CITY, KANS.

[$\phi=37^{\circ}45' N.$; $\lambda=100^{\circ}00' W.$]

January.....	27.38	27.83	26.91	15.9	25.1	23.4	32.0	10.7	21.4	50	-4	12	14	17	82	65	76	0.075	0.090	0.100	0.76	0.73	2.9	4.6
February.....	27.38	27.98	26.51	25.4	39.9	39.5	45.4	21.7	33.6	68	2	18	20	22	74	48	53	.100	.113	.121	.56	.40	6.4	3.1
March.....	27.42	27.75	26.57	32.4	46.6	46.3	51.2	29.2	40.2	70	11	25	27	27	74	50	50	.138	.152	.150	1.11	2.87	4.4	5.8
April.....	27.29	27.71	26.81	42.9	62.8	63.8	68.5	40.6	54.6	91	23	32	31	30	77	33	32	.190	.179	.172	.52	.49	.0	4.2
May.....	27.35	27.74	27.05	56.7	74.5	74.4	79.7	54.4	67.0	96	42	48	48	48	74	42	44	.346	.348	.353	1.64	.66	.0	6.1
June.....	27.37	27.60	26.95	64.3	80.0	82.2	84.8	62.1	73.4	103	48	55	53	54	75	46	43	.444	.421	.425	3.15	2.11	.0	5.1
July.....	27.36	27.59	27.11	70.1	90.6	91.4	95.5	68.5	82.0	103	60	60	57	55	71	34	32	.521	.471	.452	1.99	1.70	.0	4.4
August.....	27.38	27.60	27.17	72.6	92.7	91.9	96.5	71.0	83.8	107	61	61	58	57	70	35	33	.543	.499	.468	.80	.26	.0	4.3
September.....	27.43	27.86	27.22	64.4	79.3	78.7	83.5	59.4	71.4	96	44	51	51	50	74	41	40	.404	.405	.391	.84	.32	.0	3.3
October.....	27.42	27.84	26.93	47.2	65.6	62.1	69.5	44.5	57.0	94	34	39	38	38	74	41	47	.243	.234	.243	.87	.66	.0	3.3
November.....	27.46	27.90	26.95	32.9	48.9	45.1	53.0	29.7	41.4	78	9	24	25	25	68	40	47	.133	.137	.139	.34	.80	1.6	2.8
December.....	27.46	27.86	26.93	25.1	38.0	35.9	42.6	21.2	31.9	62	6	20	23	23	80	55	60	.111	.125	.127	.25	.12	2.0	3.2
Year.....	27.39	27.98	26.51	45.5	62.0	61.2	66.8	42.8	54.8	107	-4	37	37	37	74	44	46	.271	.264	.262	12.63	2.11	17.3	4.2

DUBUQUE, IOWA

[$\phi=42^{\circ}30' N.$; $\lambda=90^{\circ}40' W.$]

January	29.36	29.84	28.53	13.5	19.4	19.2	25.9	7.3	16.6	39	-6	9	11	13	79	69	74	0.073	0.083	0.085	3.44	1.73	3.2	5.1	6.2	4.5	5.8
February	29.22	29.93	28.39	16.6	22.2	23.1	29.2	12.8	21.0	44	-6	11	12	16	75	63	74	.081	.084	.100	2.29	1.52	8.3	5.0	5.1	5.6	5.4
March	29.36	29.70	28.82	26.8	34.7	35.0	38.8	24.9	31.8	60	9	22	21	24	81	57	64	.122	.118	.135	1.84	.64	4.7	5.5	5.7	5.1	5.6
April	29.13	29.62	28.54	42.1	50.4	50.9	54.8	39.7	47.2	81	30	36	35	37	80	58	62	.221	.215	.234	3.29	1.10	.2	7.8	7.4	7.4	7.4
May	29.23	29.49	28.87	54.9	66.1	67.2	70.5	51.8	61.2	88	43	48	48	50	78	54	55	.351	.358	.378	4.21	.92	.0	6.2	5.3	5.4	5.9
June	29.20	29.58	28.81	63.1	74.6	73.8	78.1	59.5	68.8	97	46	56	55	57	79	52	57	.473	.460	.492	5.98	2.32	.0	5.9	6.2	5.2	6.4
July	29.22	29.40	28.90	68.4	82.9	83.2	87.0	64.8	75.9	97	53	61	58	61	77	44	49	.545	.492	.558	1.57	.70	.0	3.5	3.3	3.4	3.8
August	29.27	29.52	28.99	68.7	83.8	83.2	87.8	66.4	77.1	100	53	62	62	64	79	50	54	.560	.566	.602	1.63	.75	.0	4.1	4.0	2.9	3.7
September	29.31	29.59	28.89	55.7	71.5	69.2	76.3	53.3	64.8	95	38	48	48	50	80	46	51	.380	.368	.382	1.87	.90	.0	3.8	4.0	5.1	4.3
October	29.27	29.80	28.60	43.1	54.8	52.3	58.7	40.9	49.8	85	25	38	37	38	81	53	60	.245	.246	.258	3.32	1.98	.3	5.5	6.5	4.8	6.0
November	29.31	29.93	28.64	28.6	39.4	36.2	43.7	24.7	34.2	69	4	22	23	24	75	52	60	.128	.133	.138	1.15	.67	5.9	5.0	4.4	3.9	4.2
December	29.35	29.80	28.87	21.2	25.5	24.6	29.3	16.4	22.8	45	-1	17	19	19	82	74	77	.1	.1	.108	1.18	.41	9.1	7.1	7.6	7.7	7.8
Year	29.27	29.93	28.39	41.9	52.1	51.5	56.7	38.5	47.6	100	-6	36	36	38	79	56	61	.274	.269	.289	31.77	2.32	31.7	5.4	5.5	5.0	5.5

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

DETROIT, MICH.¹[H=619 ft.; H_b=626 ft.; h_i=5 ft.; h_r=4 ft.; h_a=78 ft.]

Month	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Precipitation	Snow	Fog		Maximum temp.	32° or below	Elec- tricity										
	Average hourly ve- locity	Preval- ling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora	
	Mi.	SW.	Mi.	SW.																										
January	11.8	SW.	34	SW.	3	4	7	4	8	5	20	8	6	0	7	5	19	17	14	9	5	0	14	3	8	0	28	0	0	
February	12.4	SW.	35	SW.	3	3	4	3	6	7	11	16	6	0	3	10	15	10	8	16	6	0	3	1	15	0	25	1	2	
March	11.4	NW.	25	SW.	0	7	10	2	4	1	9	10	19	0	12	7	12	7	4	17	6	0	3	0	6	0	29	0	0	
April	11.6	E.	38	SW.	1	7	10	9	9	6	5	6	8	0	4	9	17	17	13	3	1	0	7	2	0	0	10	4	0	
May	8.4	NW.	29	NW.	0	6	7	5	7	5	7	10	13	2	7	8	16	10	7	0	0	1	6	1	0	1	0	5	1	0
June	8.5	NW.	40	SW.	1	5	10	4	10	7	8	2	14	0	3	13	14	17	13	0	0	0	9	0	0	0	0	11	0	0
July	8.4	SW.	31	NW.	0	6	6	1	6	8	19	7	7	2	13	10	8	13	9	0	0	1	2	0	0	5	0	11	0	0
August	6.6	NE.	25	SW.	0	10	12	3	10	10	8	3	5	1	16	6	9	9	7	0	0	0	11	1	0	3	0	8	1	0
September	9.0	NW.	27	NW.	0	12	3	1	11	8	9	3	13	0	11	11	8	5	4	0	0	0	6	1	0	1	0	1	0	0
October	10.5	NW.	36	SW.	1	5	6	3	8	5	14	8	13	0	2	8	21	8	5	4	0	0	9	1	0	0	6	1	1	0
November	12.4	SW.	34	NW.	2	1	3	3	5	3	23	15	7	0	6	8	16	9	7	10	4	0	7	1	7	0	15	2	0	0
December	10.1	SW.	32	SW.	1	4	3	8	5	3	19	12	8	0	4	2	25	12	7	16	8	0	15	1	11	0	30	0	0	0
Year	10.1	SW.	40	SW.	12	70	81	46	89	68	152	100	119	5	88	97	180	134	98	75	30	2	92	12	47	10	143	44	5	0

DEVILS LAKE, N. DAK.

[H=1,472 ft.; H_b=1,478 ft.; h_i=11 ft.; h_r=4 ft.; h_a=44 ft.]

January	8.5	NW.	30	N.	0	9	3	7	6	6	5	12	14	0	8	12	11	12	6	19	12	0	0	0	31	0	31	0	0	0
February	10.3	NW.	33	NW.	1	7	1	2	6	5	10	6	19	0	8	12	8	7	2	19	7	0	1	0	26	0	28	0	1	0
March	9.3	NE.	27	NE.	0	13	15	3	8	2	3	8	9	1	5	14	12	7	1	16	7	0	3	2	18	0	30	0	3	0
April	11.2	E.	37	N.	2	12	7	12	9	5	3	4	7	1	6	6	18	13	8	10	3	0	5	1	1	0	21	0	1	0
May	10.8	SE.	27	N.	0	6	16	1	14	9	0	4	12	0	9	12	10	9	7	0	0	0	3	1	0	1	1	3	4	0
June	9.5	S.	32	NE.	1	5	8	5	14	7	10	2	9	0	10	9	11	8	6	0	0	1	1	0	0	1	0	5	0	0
July	8.0	N.	27	N.	0	13	12	2	13	7	4	3	8	0	12	10	9	14	11	0	0	1	8	0	0	6	0	7	0	0
August	8.6	SE.	28	NE.	0	7	6	6	11	12	6	6	7	1	16	10	5	10	6	0	0	1	1	1	0	11	0	12	1	0
September	8.8	NW.	27	NW.	0	7	10	7	6	9	4	3	14	0	10	12	8	10	8	0	0	0	7	2	0	1	1	5	1	0
October	9.8	NW.	25	NW.	0	9	1	2	13	9	6	5	17	0	7	10	14	6	3	2	0	0	7	0	0	0	12	1	6	0
November	9.8	NW.	26	NW.	0	9	1	1	8	8	5	9	19	0	8	7	15	6	3	15	6	0	3	0	14	0	29	0	7	0
December	10.0	NW.	30	NW.	0	3	1	3	13	10	6	5	21	0	9	4	18	8	5	19	8	0	7	1	28	0	31	0	2	0
Year	9.5	NW.	37	N.	4	100	81	51	121	89	62	67	156	3	108	118	139	110	66	100	43	3	46	8	118	20	184	33	26	0

DODGE CITY, KANS.

[H=2,522 ft.; H_b=2,509 ft.; h_i=10 ft.; h_r=3 ft.; h_a=86 ft.]

January	11.1	N.	31	NW.	0	12	11	2	11	10	5	2	9	0	15	7	9	4	1	11	3	0	9	5	16	0	31	0	0	0
February	12.1	SW.	35	N.	1	8	7	4	4	9	7	9	8	0	8	12	8	3	3	5	3	0	0	0	4	0	27	0	0	0
March	13.6	NE.	52	NW.	2	8	12	4	5	11	8	6	8	0	10	11	10	6	5	9	3	1	1	0	5	0	18	3	0	0
April	14.6	N.	35	S.	4	15	7	1	9	8	9	2	9	0	12	13	5	2	1	0	0	0	0	0	0	2	6	0	0	0
May	13.3	S.	35	N.	5	6	11	5	13	10	6	2	9	0	8	19	4	10	6	0	0	0	0	0	0	3	0	5	0	0
June	12.1	S.	35	NW.	3	8	11	2	7	16	11	2	3	0	14	8	8	10	7	0	0	1	3	1	0	11	0	6	0	0
July	11.6	SE.	36	N.	1	4	7	4	17	8	10	6	6	0	16	13	2	8	3	0	0	0	1	0	0	25	0	11	0	0
August	12.2	SW.	35	SE.	1	2	4	3	18	20	10	3	2	0	16	13	2	6	4	0	0	0	2	2	0	26	0	11	0	0
September	11.7	SE.	32	SW.	1	2	18	2	12	12	10	3	1	0	16	11	3	5	3	0	0	0	3	0	0	8	0	6	0	0
October	11.6	S.	37	N.	1	11	7	4	14	7	6	4	9	0	17	7	7	5	3	0	0	0	5	1	0	1	0	2	2	0
November	11.4	S.	35	SW.	3	7	6	4	9	11	8	3	11	1	15	9	6	4	2	6	4	0	0	0	4	0	18	0	0	0
December	10.3	N.	30	SW.	0	14	11	0	6	8	9	8	6	0	11	10	10	5	2	7	4	0	6	0	6	0	30	0	0	0
Year	12.1	S.	52	NW.	22	97	112	35	125	130	99	50	81	1	158	133	74	68	40	38	17	2	30	9	35	76	130	44	2	0

DUBUQUE, IOWA

[H=641 ft.; H_b=699 ft.; h_i=60 ft.; h_r=53 ft.; h_a=79 ft.]

January	7.1	NW.	20	NW.	0	3	1	3	12	7	11	0	25	0	12	5	14	8	7	15	4	0	5	1	19	0	31	0	0	0
February	7.9	NW.	24	NW.	0	4	1	2	6	10	8	0	25	0	12	4	12	12	8	14	9	0	3	3	18	0	25	1	1	0
March	6.5	NW.	24	E.	0	3	8	9	3	4	6	3	23	3	11	5	15	9	6	11	4	0	3	3	6	0	24	0	0	0
April	7.5	SE.	24	SE.	0	5	6	7	13	8	3	2	14	2	8	3	19	16	9	3	3	2	3	0	0	0	5	4	0	0
May	6.1	S.	18	NW.	0	4	7	8	13	10	4	2	12	2	10	8	13	15	13	0	0	0	6	2	0	0	0	8	0	0
June	5.7	NW.	19	SW.	0	4	7	8	10	7	5	2	16	1	7	9	14	9	7	0	0	0	2	0	0	3	0	9	1	0
July	5.1	S.	19	NW.	0	5	0	5	8	15	16	1	10	2	16	9	6	7	5	0	0	0	6	0	0	9	0	5	0	0
August	4.9	S.	21	SE.	0	1	4	3	6	33	3	1	9	2	18	6	7	6	6	0	0	0	5	0	0	14	0	4	1	0
September	4.4	S.	16	NW.	0	4	1	2	4	17	5	0	10	17	13	12	5	7	5	0	0	0	3	3	0	4	0	5	0	0
October	5.8	NW.	19	NW.	0	2	1	4	9	12	2	7	19	6	9	9	13	11	6	3	1	0	13	6	0	0	6	0	1	0
November	7.0	NW.	22	NW.	0	2	0	2	3	14	13	1	23	2	16	4	10	6	5	8	3	0	12	1	10	0	21	3	0	0
December	6.3	NW.	18	NW.	0	3	4	5	9	10	8	5	18	0	5	3	23	12	7	14	7	0	8	4	18	0	30	0	0	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

DULUTH, MINN.																											
[$\phi=46^{\circ}47' N.$; $\lambda=92^{\circ}06' W.$]																											
Month	Pressure			Temperature									Moisture														
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness					
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.	°	°	°	°
January	28.78	29.33	27.88	0.2	6.7	4.9	13.7	-7.1	3.3	28	-24	-4	0	1	85	70	77	0.040	0.048	0.048	1.99	0.91	21.4	5.7	5.1	4.6	5.5
February	28.64	29.34	28.00	7.4	16.1	15.9	21.1	2.9	12.0	40	-23	4	8	10	85	70	77	.056	.068	.073	1.79	.82	17.0	5.7	6.5	6.1	6.3
March	28.87	29.26	28.42	16.1	27.8	25.4	31.1	13.5	22.3	48	-8	12	16	18	82	60	72	.076	.094	.103	3.40	.20	3.8	3.9	5.2	4.7	4.7
April	28.70	29.07	28.15	33.8	40.0	38.4	43.2	30.9	37.0	64	20	29	31	30	83	72	75	.163	.174	.172	3.17	.75	5.4	6.7	7.0	7.0	7.1
May	28.75	29.18	28.30	46.3	56.2	53.3	60.3	41.7	51.0	81	29	39	41	39	79	61	63	.252	.273	.256	3.92	1.10	.0	5.7	5.8	5.3	5.7
June	28.70	29.06	28.13	55.5	67.0	63.8	70.7	50.0	60.4	81	38	49	50	50	80	57	63	.358	.370	.365	3.51	1.77	.0	5.2	5.9	5.6	5.8
July	28.73	29.44	28.36	60.7	71.6	68.0	75.7	56.3	66.0	90	48	55	58	57	83	65	70	.442	.484	.467	2.73	1.15	.0	4.5	5.6	4.7	4.9
August	28.76	29.12	28.48	63.3	75.0	72.6	79.3	60.1	69.7	93	51	58	60	60	84	62	67	.494	.530	.534	3.87	1.55	.0	5.4	4.9	3.1	4.7
September	28.79	29.12	28.26	50.8	62.0	56.5	65.3	47.1	56.2	84	33	47	48	48	86	62	74	.338	.356	.350	4.30	3.01	.0	5.9	5.7	5.8	6.1
October	28.77	29.30	28.13	37.0	45.8	41.9	48.5	33.8	41.2	74	18	32	34	34	82	66	75	.192	.215	.207	1.50	.74	T	6.3	7.4	6.1	7.2
November	28.73	29.30	28.03	24.5	30.8	27.8	34.0	21.3	27.6	57	0	20	21	21	81	66	75	.114	.122	.122	1.29	.62	8	6.9	6.4	6.1	6.6
December	28.79	29.36	28.15	10.6	17.7	15.5	21.2	6.2	13.7	39	-10	7	10	10	83	69	77	.063	.074	.073	.89	.38	9.2	7.0	5.9	6.2	6.5
Year	28.75	29.36	27.88	33.8	43.1	40.3	47.0	29.7	38.4	93	-24	29	31	32	82	65	72	.216	.234	.231	29.36	3.01	57.6	5.7	6.0	5.4	5.9

EASTPORT, MAINE

[$\phi=44^{\circ}54' N.$; $\lambda=66^{\circ}59' W.$]

January	30.14	30.85	29.28	26.6	30.8	30.0	36.5	20.3	28.4	49	1	23	25	25	84	81	81	0.141	0.150	0.151	3.05	0.67	9.2	6.6	7.1	6.0	6.6	6.6	6.6	6.6	6.6	6.6	
February	29.81	30.29	28.77	25.9	29.0	29.1	33.7	21.4	27.6	49	10	22	23	23	83	78	76	.125	.132	.129	.64	.23	6.9	7.4	6.5	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
March	29.68	30.26	29.14	25.0	31.3	30.6	35.8	21.4	28.6	44	5	18	22	25	71	67	77	.104	.125	.136	1.37	.56	4.8	5.5	5.7	5.5	6.0	6.0	6.0	6.0	6.0	6.0	
April	29.94	30.50	29.28	37.9	44.6	41.0	47.4	34.0	40.7	62	28	33	37	35	83	76	80	.191	.222	.202	1.75	.60	1.6	5.7	6.2	5.9	6.1	6.1	6.1	6.1	6.1	6.1	
May	29.88	30.33	29.41	49.1	54.9	50.6	59.4	42.6	51.0	90	37	43	43	43	81	69	78	.278	.288	.283	2.20	.60	.0	7.1	7.3	8.1	7.2	7.2	7.2	7.2	7.2	7.2	
June	29.84	30.29	29.31	56.3	60.6	56.0	65.5	48.6	57.0	81	44	51	52	52	85	76	86	.383	.394	.385	3.23	.86	.0	5.8	7.7	7.5	7.3	7.3	7.3	7.3	7.3	7.3	
July	29.87	30.11	29.40	61.7	68.0	63.2	72.6	53.6	63.1	87	49	56	58	56	83	72	80	.454	.488	.460	.75	.59	.0	4.7	6.1	5.6	6.1	6.1	6.1	6.1	6.1	6.1	
August	29.97	30.31	29.65	61.2	68.1	63.1	73.2	55.4	64.3	86	52	58	59	58	90	75	84	.482	.508	.482	1.22	.74	.0	3.9	5.4	4.7	6.4	6.4	6.4	6.4	6.4	6.4	6.4
September	29.94	30.44	29.23	54.7	59.8	56.3	64.1	50.0	57.0	87	43	50	51	50	86	74	82	.379	.385	.376	4.41	2.12	.0	4.2	5.0	4.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7
October	29.94	30.49	29.08	45.7	50.6	48.4	54.0	42.1	48.0	66	32	40	37	41	82	69	77	.267	.265	.271	2.78	1.33	.0	5.9	6.4	5.9	6.4	6.4	6.4	6.4	6.4	6.4	6.4
November	29.90	30.32	29.38	37.8	41.7	40.0	44.1	33.0	38.6	55	21	32	34	34	80	75	78	.192	.207	.201	2.37	1.13	T	7.8	7.4	6.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
December	29.95	30.53	29.23	23.9	27.9	26.7	32.0	18.7	25.4	49	-4	20	21	21	81	75	77	.112	.123	.118	1.51	.52	7.3	5.5	6.7	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Year	29.90	30.85	28.77	42.2	47.3	44.6	51.5	36.8	44.1	90	-4	37	38	39	82	74	80	.259	.274	.266	25.28	2.12	29.8	5.8	6.5	6.1	6.6	6.1	6.6	6.1	6.6	6.1	6.6

ELKINS, W. VA.

[$\phi=38^{\circ}54' N.$; $\lambda=79^{\circ}51' W.$]

January	28.12	28.53	27.62	38.9	45.2	42.5	53.4	33.5	43.4	72	18	35	37	37	87	74	81	0.220	0.230	0.228	6.92	1.00	0	7.8	8.4	8.4	8.0
February	27.95	28.37	27.35	27.3	33.9	33.1	40.8	22.3	31.6	74	8	22	25	25	81	72	73	.129	.151	.144	3.48	1.22	9.6	8.2	7.5	8.0	7.7
March	27.94	28.35	27.49	29.4	39.1	38.0	44.4	25.9	35.2	70	8	25	26	26	83	60	63	.138	.144	.144	3.51	1.06	11.9	7.2	6.2	6.7	6.8
April	27.93	28.36	27.54	43.3	53.7	51.6	59.8	37.5	48.6	81	23	36	36	36	76	56	60	.220	.224	.222	4.65	2.50	T	6.2	6.8	7.0	7.0
May	28.00	28.27	27.70	51.7	66.4	63.7	71.4	45.3	58.4	87	32	46	42	46	84	46	56	.326	.290	.327	4.11	.67	.0	4.8	5.6	6.1	6.2
June	27.97	28.24	27.67	61.7	73.5	71.0	78.1	57.0	67.6	86	47	58	58	60	89	60	69	.488	.484	.518	4.11	1.12	.0	6.2	6.5	7.0	7.1
July	28.04	28.23	27.88	61.6	75.5	72.8	80.4	57.5	69.0	88	45	59	59	60	91	59	66	.502	.523	.536	2.77	.76	.0	4.7	6.0	5.8	6.5
August	28.10	28.32	27.93	62.9	78.5	73.0	82.0	60.5	71.2	90	52	62	62	64	96	60	75	.550	.572	.603	6.61	1.85	.0	4.8	5.7	5.9	6.4
September	28.09	28.46	27.72	50.6	68.4	60.4	72.7	47.8	60.2	88	33	50	51	54	97	55	81	.374	.390	.437	3.83	3.06	.0	3.0	4.1	4.6	5.1
October	28.02	28.49	27.47	43.8	53.1	49.6	58.2	39.3	48.8	82	22	40	40	41	87	65	74	.260	.269	.274	8.31	2.04	1.7	7.4	7.0	5.8	7.4
November	28.06	28.60	27.52	32.4	43.3	38.7	47.7	28.1	37.9	72	6	27	27	29	82	59	71	.158	.161	.168	1.24	3.3	5.8	7.0	6.6	7.2	7.1
December	28.06	28.48	27.53	28.9	35.1	33.2	40.1	24.6	32.4	60	-5	25	26	26	84	71	76	.154	.158	.159	3.07	1.02	9.5	7.2	7.1	6.9	7.2
Year	28.02	28.60	27.35	44.4	55.5	52.3	60.8	39.9	50.4	90	-5	40	41	42	86	61	70	.293	.300	3.13	52.61	3.06	38.5	6.2	6.5	6.6	6.9

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

DULUTH, MINN.

[H=1,128 ft.; H_b=1,133 ft.; h_t=5 ft.; h_r=3 ft.; h_a=47 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from												Precipitation	Snow			Fog		Maximum temp.	32° temperature or below	Elec- tricity			
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	14.2	NW.	46	NW.	8	1	7	7	3	1	8	14	21	0	13	5	13	12	7	20	12	0	4	1	31	0	31	0	0
February	15.2	NW.	53	NW.	9	1	6	4	3	2	7	12	21	0	8	6	14	12	8	18	12	0	2	0	23	0	28	0	2
March	12.0	NW.	40	NE.	5	8	14	6	1	0	3	8	22	0	14	8	9	5	4	13	5	0	2	2	15	0	31	0	4
April	13.5	NE.	37	NW.	2	1	35	4	2	0	1	5	12	0	6	6	18	14	11	8	6	1	12	11	2	0	18	1	3
May	11.3	NE.	40	NW.	1	6	27	8	0	3	5	5	8	0	8	12	11	13	11	0	0	1	10	9	0	0	3	5	5
June	10.0	NE.	30	W.	0	6	15	7	2	0	3	9	18	0	8	11	11	7	5	0	0	0	3	3	0	0	0	4	1
July	10.1	NE.	27	NE.	0	3	24	7	2	1	2	9	14	0	11	13	7	7	7	0	0	1	5	6	0	2	0	8	3
August	9.8	NE.	29	NW.	0	6	21	4	1	3	12	6	9	0	11	14	6	8	7	0	0	0	5	5	0	3	0	7	6
September	10.8	NW.	32	NW.	1	3	14	2	2	0	8	13	18	0	6	13	11	14	11	0	0	0	3	4	0	0	0	2	3
October	11.4	NW.	43	NW.	1	2	12	8	3	1	5	8	23	0	6	5	20	8	6	6	0	0	6	5	1	0	13	0	4
November	13.8	W.	41	NW.	3	8	7	3	0	4	10	14	14	0	8	6	16	6	5	13	4	0	2	2	12	0	23	1	1
December	12.4	NW.	43	NW.	7	1	5	7	3	1	10	12	23	0	11	4	16	9	5	17	9	0	3	2	27	0	31	0	2
Year	12.0	NW.	53	NW.	37	46	187	67	22	16	74	115	203	0	110	103	152	115	87	95	48	3	57	50	111	5	178	28	34

EASTPORT, MAINE

[H=33 ft.; H_b=75 ft.; h_t=67 ft.; h_r=62 ft.; h_a=85 ft.]

January	11.2	NW.	30	E.	0	7	3	2	3	4	11	11	21	0	7	8	16	13	11	11	8	0	12	3	10	0	27	0	0
February	12.8	NW.	46	E.	3	9	8	8	1	1	6	7	16	0	5	8	15	11	5	12	8	0	6	1	13	0	24	0	0
March	12.1	NW.	42	E.	2	8	1	2	2	0	10	9	30	0	12	2	17	9	5	16	9	0	3	0	9	0	30	0	2
April	10.8	SW.	40	E.	4	3	11	4	4	4	12	7	15	0	8	6	16	10	8	5	3	0	6	2	0	0	11	0	3
May	9.3	SW.	41	E.	4	5	6	11	2	11	20	4	2	1	5	7	19	12	11	0	0	0	19	0	0	1	0	0	2
June	8.0	SW.	30	E.	0	3	3	8	6	10	17	3	9	1	2	11	17	16	15	0	0	0	20	10	0	0	0	2	1
July	7.3	SW.	21	NE.	0	2	2	1	0	12	31	5	4	5	7	10	14	5	3	0	0	0	21	8	0	0	0	1	0
August	8.5	SW.	25	SW.	0	3	3	4	0	6	36	2	6	2	8	7	16	7	4	0	0	0	23	16	0	0	0	2	0
September	10.0	SW.	30	E.	0	6	5	5	1	5	23	6	9	0	10	10	10	13	12	0	0	0	16	7	0	0	0	1	2
October	12.2	SW.	35	S.	1	2	1	6	3	8	17	17	8	0	9	7	15	14	12	0	0	0	15	2	0	0	1	1	3
November	12.7	W.	46	E.	4	2	3	8	1	4	10	18	14	0	5	3	22	13	10	3	0	0	13	0	1	0	15	0	1
December	12.1	NW.	39	E.	1	7	7	5	2	0	7	12	22	0	8	7	16	13	8	15	9	0	7	0	12	0	29	0	0
Year	10.6	SW.	46	E.	19	57	53	64	25	65	200	101	156	9	86	86	193	136	104	62	37	0	161	49	45	1	137	7	14

ELKINS, W. VA.

[H=1,927 ft.; H_b=1,963 ft.; h_t=59 ft.; h_r=52 ft.; h_a=67 ft.]

January	7.1	SE.	35	SW.	2	9	4	6	10	9	8	7	7	2	2	10	19	19	18	0	0	0	11	2	0	0	14	0	0
February	7.5	W.	34	W.	1	4	1	4	10	6	8	11	11	1	5	5	18	17	12	20	15	0	0	0	7	0	25	2	0
March	7.9	W.	29	W.	0	4	6	1	2	7	4	17	20	1	6	11	14	16	14	11	8	1	1	1	5	0	23	3	0
April	8.3	NW.	34	W.	1	7	1	5	14	5	8	5	14	1	6	8	16	16	11	3	2	0	1	1	0	0	8	1	0
May	5.8	W.	40	NW.	1	13	0	4	12	5	6	7	12	3	4	16	11	17	16	0	0	1	5	5	0	0	1	6	0
June	5.1	NW.	24	E.	0	4	4	2	6	8	3	13	20	0	2	16	12	16	13	0	0	0	12	8	0	0	0	9	0
July	4.8	W.	21	NW.	0	2	4	7	5	7	9	15	8	5	5	14	12	15	11	0	0	0	15	10	0	0	0	13	0
August	3.8	W.	25	NW.	0	11	6	9	6	7	6	5	3	9	7	9	15	15	13	0	0	0	16	12	0	2	0	10	0
September	4.2	N.	19	SW.	0	7	8	9	9	6	7	3	9	2	9	15	6	10	7	0	0	0	23	20	0	0	0	1	0
October	6.4	SE.	22	SE.	0	7	2	3	14	9	5	6	11	5	4	9	18	18	16	4	3	7	1	0	0	9	0	0	0
November	6.5	W.	33	W.	1	6	4	1	7	6	9	15	7	5	5	7	18	14	11	9	6	0	14	1	3	0	21	0	0
December	6.5	W.	22	W.	0	7	7	1	6	11	8	20	2	0	5	8	18	19	13	8	8	0	6	0	8	0	21	0	0
Year	6.1	W.	40	NW.	6	81	47	52	101	86	81	124	124	34	60	128	177	192	155	55	42	2	111	61	23	2	122	45	0

EL PASO, TEX.

[H=3,710 ft.; H_b=3,778 ft.; h_t=82 ft.; h_r=76 ft.; h_a=101 ft.]

January	7.9	W.	35	SW.	1	2	9	6	0	0	2	26	17	0	17	11	3	1	1	0	0	0	0	0	0	0	21	0	0
February	8.6	W.	30	SW.	0	0	4	6	2	0	6	20	17	1	15	8	5	5	2	2	2	0	3	1	0	0	8	0	0
March	9.3	E.	29	SW.	0	0	11	22	1	0	5	19	3	1	20	6	5	4	2	0	0	1	0	0	0	0	1	0	0
April	9.2	W.	30	NW.	0	1	1	7	1	1	8	26	12	3	24	4	2	0	0	0	0	0	0	0	0	2	0	1	0
May	8.4	E.	29	NW.	0	2	13	14	3	2	4	15	5	4	20	10	1	3	2	0	0	0	0	0	0	15	0	6	0
June	8.5	E.	27	E.	0	1	10	19	1	1	5	22	1	0	21	8	1	5	4	0	0	0	0	0	0	28	0	4	0
July	8.0	E.	27	NE.	0	3	11	29	9	0	0	5	5	0	19	12	0	4	3	0	0	0	0	0	0	29	0	6	0
August	7.5	E.	26	SE.	0	1	5	35	8	0	2	5	6	0	20	11	0	6	4	0	0	1	0	0	0	29	0	13	0
September	7.5	E.	24	N.	0	1	7	22	17	2	3	2	6	0	18	10	2	4	3	0	0	0	0	0	0	11	0	7	0
October	7.3	E.	23	E.	0	1	4	19	13	1	4	8	12	0	24	1	6	5	4	0	0	0	1	0	0	1	0	0	0
November	7.0	E.	23	SE.	0	0	4	17	7	1	3	9	19	0	22	7	1	2	2	0	0	0	0	0	0	0	1	0	0
December	7.5	NW.	25	E.	0	1	6	13	8	2	1	12	19	0	12	12	7	8	6	3	2	0	3	2	0	0	5	0	0
Year	8.0	E.	35	SW.	1	13	85	209	70	10	43	169	122	9	232	100	33	47	33	5	4	2	7	3	0	115	35	38	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

ERIE, PA.

[$\phi=42^{\circ} 07' N.$; $\lambda=80^{\circ} 05' W.$]

Month	Pressure			Temperature								Moisture															
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness					
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum																
	In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.	8.0	8.6	7.1	7.9
January	29.39	29.96	28.76	32.6	35.4	34.7	42.4	27.1	34.8	64	17	27	28	28	78	73	74	0.154	0.158	0.160	6.05	1.32	7.1	8.0	8.6	7.1	7.9
February	29.19	29.77	28.47	27.8	32.1	31.1	36.9	24.1	30.5	67	13	21	22	24	76	66	74	.117	.127	.133	2.15	1.14	6.5	8.8	7.3	7.2	7.8
March	29.22	29.65	28.69	27.8	31.9	30.8	35.7	25.1	30.4	49	14	22	24	23	76	70	72	.116	.127	.124	1.23	.30	5.4	6.7	6.2	6.6	6.6
April	29.18	29.62	28.66	41.4	46.3	45.6	52.6	37.9	45.2	70	30	34	36	35	74	68	68	.195	.212	.208	7.03	2.50	T	6.6	6.3	7.2	6.8
May	29.22	29.58	28.91	55.2	62.4	59.6	66.7	49.8	58.2	89	39	45	47	47	71	59	65	.315	.335	.337	2.10	.51	.0	5.5	4.4	4.5	4.8
June	29.17	29.51	28.84	65.0	70.3	69.7	74.1	60.2	67.2	85	52	57	57	58	77	65	67	.475	.476	.488	6.64	3.48	.0	6.7	4.5	4.0	5.2
July	29.22	29.41	28.92	70.2	77.0	75.4	80.5	65.7	73.1	91	56	62	62	61	74	60	62	.559	.566	.552	1.60	.73	.0	4.5	4.6	4.2	4.6
August	29.30	29.54	29.00	70.1	77.9	75.0	81.8	66.8	74.3	92	59	63	64	64	79	65	71	.586	.611	.613	4.45	1.36	.0	4.1	4.7	4.9	4.6
September	29.31	29.73	28.79	57.8	67.3	63.5	70.8	54.6	62.7	89	42	50	51	51	75	57	65	.382	.395	.402	2.56	1.90	.0	4.8	4.8	4.3	4.7
October	29.24	29.84	28.63	47.4	53.2	50.2	56.2	43.5	49.8	79	32	40	41	41	76	65	71	.266	.281	.277	3.75	1.47	2.8	7.1	7.2	5.9	6.8
November	29.26	29.80	28.57	38.7	43.1	40.5	46.2	34.4	40.3	67	23	30	32	32	73	67	72	.179	.191	.187	1.89	.41	7.8	7.7	6.8	7.0	7.1
December	29.32	29.83	28.75	26.8	30.3	29.6	34.2	24.0	29.1	47	10	22	23	24	80	74	77	.119	.127	.131	3.55	.94	11.6	8.3	8.6	8.0	8.4
Year	29.25	29.96	28.47	46.7	52.3	50.5	56.5	42.8	49.6	92	10	39	41	41	76	66	70	.289	.300	.301	43.00	3.48	41.2	6.6	6.2	5.9	6.3

ESCANABA, MICH.

[$\phi=45^{\circ} 48' N.$; $\lambda=87^{\circ} 05' W.$]

January....	29.40	30.03	28.46	11.3	19.2	18.8	25.9	3.2	14.6	37	-13	9	13	14	88	74	78	0.072	0.083	0.088	2.70	0.67	23.5	6.0	6.1	4.8	6.1
February....	29.24	29.96	28.40	16.3	23.6	21.6	28.0	11.9	20.0	41	-6	14	16	17	90	72	80	.089	.099	.098	3.88	2.30	17.8	6.4	7.3	6.8	6.3
March.....	29.43	29.76	28.87	19.1	29.1	26.8	32.4	16.0	24.2	42	-2	14	17	16	78	57	63	.083	.095	.093	.11	.04	1.4	4.7	5.6	5.0	5.1
April.....	29.30	29.67	28.87	35.0	42.1	40.3	46.3	31.5	38.9	66	19	30	31	30	82	66	68	.169	.180	.172	2.31	.74	8.5	6.6	7.7	6.7	7.0
May.....	29.34	29.71	28.87	47.3	57.4	56.5	62.4	42.5	52.4	87	31	39	41	39	74	57	54	.249	.267	.253	1.38	.39	.0	4.6	5.1	4.9	4.9
June.....	29.29	29.62	28.96	58.2	67.2	65.5	71.0	52.5	61.8	86	38	51	50	49	77	56	57	.382	.375	.361	1.82	1.05	.0	5.9	5.9	4.5	5.6
July.....	29.30	29.55	28.87	64.1	73.2	70.8	77.1	58.7	67.9	89	45	57	58	57	79	62	64	.482	.507	.487	2.98	.85	.0	4.4	4.7	4.5	4.5
August.....	29.38	29.68	29.09	63.8	73.7	71.2	77.5	59.4	68.4	88	47	58	60	61	83	65	70	.492	.556	.539	1.17	.33	.0	4.2	4.9	5.0	4.6
September....	29.38	29.76	28.79	52.4	61.8	58.6	64.9	47.8	56.4	86	33	48	49	50	86	66	74	.361	.382	.384	7.58	5.05	.0	5.6	6.6	5.7	6.0
October.....	29.32	29.89	28.21	39.0	47.1	45.2	50.8	36.1	43.4	75	23	35	36	37	84	65	73	.213	.223	.235	2.30	1.04	T	6.4	7.8	6.2	7.5
November....	29.29	29.89	28.45	30.8	36.3	34.0	39.5	27.6	33.6	59	4	25	26	26	77	65	70	.144	.151	.149	2.63	1.02	3.4	8.2	7.7	6.1	7.3
December....	29.38	30.00	28.74	18.9	23.6	22.2	27.2	13.3	20.2	36	-3	13	15	16	77	69	74	.083	.090	.092	.91	.29	13.0	7.7	8.2	7.3	7.8
Year.....	29.34	30.03	28.21	38.0	46.2	44.3	50.2	33.4	41.8	89	-13	33	34	34	81	64	69	.235	.249	.246	29.77	5.05	67.6	5.9	6.5	5.6	6.1

EUREKA, CALIF.

[$\phi=40^{\circ} 48' N.$; $\lambda=124^{\circ} 11' W.$]

January....	30.03	30.35	29.68	37.5	44.6	45.2	46.6	34.3	40.4	51	25	31	35	36	79	70	71	0.180	0.208	0.214	4.27	0.83	T	5.5	6.2	5.3	5.9
February....	30.00	30.37	29.50	43.8	49.5	49.6	51.9	39.8	45.8	62	33	38	40	41	81	71	74	.230	.248	.259	5.41	1.47	0.0	7.7	8.0	8.2	7.8
March.....	29.93	30.30	29.33	46.4	53.2	52.6	56.2	44.0	50.1	76	39	42	44	44	86	72	75	.272	.288	.291	7.19	1.72	.0	7.4	8.4	8.7	8.3
April.....	30.09	30.31	29.73	47.1	53.2	52.4	55.2	43.8	49.5	66	38	41	42	43	80	68	72	.257	.274	.282	6.55	2.28	.0	6.9	6.0	6.6	5.9
May.....	30.02	30.27	29.73	49.2	55.1	55.1	56.8	47.7	52.2	60	42	46	46	47	88	73	74	.308	.316	.321	.88	.45	.0	7.2	5.4	5.5	5.5
June.....	29.95	30.19	29.58	54.2	60.5	60.2	63.2	52.8	58.0	69	44	51	52	52	89	75	75	.373	.392	.390	1.35	.54	.0	8.0	7.3	7.1	7.6
July.....	29.97	30.16	29.80	52.6	57.8	58.4	60.0	51.7	55.8	63	48	50	51	51	91	77	77	.358	.368	.375	.03	.02	.0	6.4	5.0	3.5	5.2
August.....	29.99	30.17	29.84	52.5	58.5	59.4	61.3	51.4	56.4	67	48	50	51	52	92	77	77	.361	.379	.389	.05	.03	.0	5.7	4.6	2.4	4.3
September....	29.96	30.14	29.79	52.6	59.1	58.5	61.6	51.3	56.4	72	45	50	51	52	93	77	80	.368	.381	.391	.19	.08	.0	6.1	6.2	5.7	6.2
October.....	29.99	30.16	29.75	53.0	60.4	59.6	63.2	50.5	56.8	71	45	50	52	52	90	75	78	.360	.385	.394	4.33	2.36	.0	4.6	5.3	5.8	5.7
November....	29.99	30.30	29.58	51.7	57.0	56.3	59.7	48.5	54.1	68	42	48	48	50	87	74	79	.333	.343	.357	10.96	2.26	.0	6.2	7.4	7.5	7.3
December....	30.03	30.28	29.24	48.2	55.3	55.0	58.2	45.2	51.7	70	35	44	44	46	86	69	74	.290	.299	.320	4.26	1.59	.0	6.3	6.8	6.6	7.0
Year.....	30.00	30.37	29.24	49.1	55.4	55.2	57.8	46.8	52.3	76	25	45	46	47	87	73	76	.308	.323	.332	45.47	2.36	T	6.5	6.4	6.1	6.4

EVANSVILLE, IND.

[$\phi=37^{\circ} 58' N.$; $\lambda=87^{\circ} 33' W.$]

January.....	29.68	30.04	29.17	36.5	39.6	39.6	44.9	31.3	38.1	64	13	32	32	34	83	75	80	0.194	0.200	0.211	14.78	3.26	7.0	8.6	8.5	7.3	8.6
February.....	29.59	30.19	28.93	32.9	37.5	38.1	43.0	28.5	35.8	65	15	25	26	28	72	64	66	.144	.154	.164	1.88	.66	3.9	7.2	6.7	5.6	6.8
March.....	29.62	29.92	28.97	37.1	45.3	45.8	51.1	34.3	42.7	70	23	29	28	29	72	52	53	.169	.162	.165	.62	.27	1.0	6.9	6.5	6.5	6.7
April.....	29.46	29.98	28.96	50.5	59.8	59.3	65.2	46.9	56.0	85	35	41	42	43	70	55	58	.268	.291	.300	4.24	1.59	.0	6.2	7.1	6.9	6.6
May.....	29.52	29.72	29.31	61.4	72.2	71.8	77.0	58.2	67.6	95	45	53	52	54	74	52	56	.411	.407	.429	5.62	1.93	.0	4.6	5.7	6.0	5.2
June.....	29.49	29.83	29.23	70.7	80.8	80.8	85.5	67.8	76.6	97	55	62	61	62	75	54	55	.569	.558	.574	5.09	1.48	.0	5.9	7.0	5.8	6.3
July.....	29.54	29.75	29.36	71.9	83.7	83.3	87.9	68.3	78.1	95	55	63	61	63	74	48	52	.585	.561	.588	1.76	.83	.0	3.7	5.2	3.7	4.4
August.....	29.56	29.75	29.37	73.4	86.0	84.5	90.7	71.3	81.0	96	65	66	66	67	79	54	57	.651	.662	.665	3.45	1.91	.0	3.6	5.1	4.5	4.4
September.....	29.60	29.92	29.26	61.4	74.7	74.1	79.8	59.4	69.6	96	45	54	52	54	76	47	51	.438	.420	.446	1.80	1.37	.0	3.4	3.8	2.9	3.5
October.....	29.57	30.04	28.99	50.5	61.1	59.2	65.7	48.0	56.8	89	32	44	43	44	78	55	59	.313	.312	.320	5.57	2.82	.0	5.3	5.9	4.5	5.6
November.....	29.68	30.26	29.13	38.4	46.9	46.2	52.0	36.3	44.2	78	18	30	31	31	73	56	58	.182	.189	.196	1.57	.52	2.0	6.0	5.7	4.7	5.6
December.....	29.70	30.14	29.10	31.5	36.8	36.9	40.5	28.8	34.6	56	8	26	29	29	80	73	74	.157	.176	.181	2.71	1.18	.9	6.6	8.2	7.4	7.9
Year.....	29.58	30.26	28.93	51.4	60.4	60.0	65.3	48.3	56.8	97	8	44	44	45	76	57	60	.340	.341	.353	49.09	3.26	14.8	5.7	6.3	5.5	6.0

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

ERIE, PA.

[H=670 ft.; H_b=714 ft.; h_i=130 ft.; h_r=122 ft.; h_a=166 ft.]

Month	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from											Precipitation	Snow	Fog		Maxi- mum temp.	32° temperature or below	Elec- tricity							
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora	
January	15.3	W	53	SE.	14	6	5	1	4	11	13	13	9	0	2	11	18	18	14	10	6	0	2	0	6	0	27	0	0	
February	15.5	W.	45	SE.	5	6	2	1	2	14	9	14	8	0	3	7	18	11	6	16	8	0	0	0	13	0	24	2	0	
March	13.6	W.	35	W.	2	6	8	0	0	5	5	22	16	0	9	4	18	14	8	21	12	2	3	2	10	0	29	1	0	
April	14.9	W.	43	SE.	8	8	10	0	12	4	5	12	9	0	6	9	15	16	12	3	0	0	2	0	0	0	5	3	0	
May	10.4	W.	30	W.	0	7	8	1	2	5	9	18	11	1	13	9	9	15	11	0	0	0	0	2	0	0	0	4	0	0
June	9.9	NW.	33	NW.	2	14	5	2	4	2	9	10	14	0	10	13	7	11	8	0	0	0	1	1	0	0	0	4	0	0
July	10.5	NW.	35	SW.	2	9	2	3	2	7	14	10	15	0	10	17	4	11	7	0	0	0	0	0	0	1	0	9	0	0
August	9.2	N.	30	SW.	0	13	8	2	8	5	5	10	11	0	14	10	7	11	9	0	0	0	0	0	0	3	0	7	0	0
September	12.1	S.	32	W.	1	12	6	4	3	14	6	3	12	0	9	16	5	5	4	0	0	0	0	0	0	0	0	4	0	0
October	15.1	S.	40	S.	4	6	4	2	9	15	4	9	13	0	4	12	15	15	13	4	2	0	0	0	0	0	1	1	0	0
November	15.9	SW.	43	W.	6	1	3	1	3	11	25	8	8	0	8	2	20	15	11	11	5	0	0	0	3	0	11	1	0	0
December	13.0	SW.	34	SW.	4	3	5	1	3	7	19	18	5	1	4	2	25	14	11	18	9	0	2	0	10	0	26	0	0	0
Year	12.9	W.	53	SE.	48	91	66	18	52	100	123	147	131	2	92	112	161	156	114	83	42	2	10	5	42	4	123	36	0	0

ESCANABA, MICH.

[H=600 ft.; H_b=612 ft.; h_i=41 ft.; h_r=34 ft.; h_a=49 ft.]

January	9.9	SW.	25	S.	0	7	5	4	5	8	16	4	13	0	10	4	17	11	8	20	11	0	4	0	20	0	31	0	1	0	0
February	9.0	S.	24	W.	0	8	2	3	3	14	10	6	10	0	8	7	13	14	12	17	11	0	6	3	3	0	27	0	1	0	0
March	8.8	N.	23	NE.	0	27	3	0	2	4	6	6	14	0	10	13	8	5	1	18	5	0	3	1	12	0	31	0	3	0	0
April	9.5	N.	25	NE.	0	17	9	12	2	5	3	2	10	0	7	6	17	10	10	8	4	0	8	1	0	0	18	1	2	0	0
May	8.8	S.	24	N.	0	13	14	3	5	15	1	3	7	1	11	11	9	9	8	0	0	0	4	0	0	0	2	3	6	0	0
June	7.7	S.	25	S.	0	12	2	2	4	21	6	5	8	0	6	17	7	7	5	0	0	0	3	0	0	0	0	3	0	0	0
July	7.6	S.	23	NW.	0	11	3	4	8	17	7	4	8	0	8	19	4	12	8	0	0	0	9	0	0	0	0	8	1	0	0
August	7.3	S.	24	NE.	0	10	10	2	3	22	9	2	4	0	12	12	7	6	5	0	0	0	15	2	0	0	0	3	2	0	0
September	7.9	S.	23	N.	0	13	6	3	4	15	6	5	8	0	8	9	13	12	8	0	0	0	4	1	0	0	0	4	2	0	0
October	8.1	NW.	25	NW.	0	4	3	3	2	10	11	10	19	0	4	9	18	10	4	8	2	0	12	5	0	0	13	0	3	0	0
November	9.4	NW.	32	SW.	1	2	1	4	2	10	12	11	18	0	7	6	17	11	8	12	4	0	1	1	9	0	21	1	1	0	0
December	8.3	NW.	32	E.	0	7	1	5	2	3	17	9	18	0	3	7	21	9	5	24	9	0	5	1	25	0	31	0	4	0	0
Year	8.5	S.	32	SW.	1	131	59	45	42	144	104	67	137	1	94	120	151	116	82	107	46	0	74	15	86	0	174	23	26	0	0

EUREKA, CALIF.

[H=43 ft.; H_b=60 ft.; h_i=72 ft.; h_r=65 ft.; h_a=88 ft.]

January	8.4	SE.	38	N.	2	14	8	3	13	11	7	2	3	1	7	10	14	19	15	1	1	4	1	0	0	0	9	1	0	0	0
February	8.4	SE.	32	N.	4	13	2	3	17	10	2	5	1	3	3	7	18	18	14	0	0	0	2	0	0	0	0	0	0	0	0
March	7.6	SE.	32	SW.	1	7	5	8	15	6	7	7	5	2	4	2	25	21	19	0	0	2	5	3	0	0	0	0	1	0	0
April	9.4	N.	31	N.	0	19	4	2	9	11	5	6	3	1	9	6	15	17	14	0	0	0	0	0	0	0	0	1	0	0	0
May	9.2	N.	32	N.	1	26	0	1	5	10	8	5	6	1	9	9	13	11	6	0	0	0	3	0	0	0	0	0	0	0	0
June	7.0	SW.	24	SW.	0	12	2	2	11	5	13	8	5	2	4	6	20	10	9	0	0	0	4	3	0	0	0	0	0	0	0
July	7.3	NW.	24	N.	0	16	0	0	4	6	10	9	15	2	8	14	9	2	0	0	0	0	8	2	0	0	0	0	0	0	0
August	6.1	NW.	23	N.	0	13	1	0	8	6	7	7	17	3	13	13	5	2	0	0	0	0	17	4	0	0	0	0	0	0	0
September	5.7	NW.	21	S.	0	18	4	1	6	6	7	6	7	5	8	7	15	6	2	0	0	0	14	3	0	0	0	0	2	0	0
October	5.2	SW.	18	SE.	0	12	2	5	9	3	12	5	8	6	7	12	12	11	7	0	0	0	21	15	0	0	0	1	0	0	0
November	7.7	SE.	27	SW.	0	8	6	2	19	13	6	2	2	2	6	5	19	18	15	0	0	0	11	6	0	0	0	1	0	0	0
December	6.8	SE.	32	S.	1	7	5	6	17	11	5	4	6	1	7	6	18	12	9	0	0	2	11	7	0	0	0	1	0	0	0
Year	7.4	N.	38	N.	9	165	39	33	133	98	89	66	78	29	85	97	183	147	110	1	1	8	97	43	0	0	9	8	0	0	0

EVANSVILLE, IND.

[H=387 ft.; H_b=431 ft.; h_i=76 ft.; h_r=74 ft.; h_a=116 ft.]

January	10.4	N.	32	SW.	1	13	14	8	5	10	4	3	5	0	3	2	26	18	15	1	1	0	18	3	1	0	19	2	0	0
February	12.2	NW.	43	SW.	2	9	0	2	7	9	7	10	11	1	5	7	16	14	10	11	6	0	4	2	5	0	19	1	0	0
March	9.7	N.	35	SW.	1	18	9	4	2	5	6	8	9	1	2	18	11	7	3	7	2	0	5	0	0	0	15	0	0	0
April	10.5	S.	38	SW.	3	9	3	11	3	11	9	8	6	0	4	10	16	16	13	0	0	0	3	1	0	0	0	11	0	0
May	7.7	S.	34	SW.	1	7	7	9	7	13	7	5	7	0	11	12	8	10	10	0	0	2	2	0	0	5	0	9	0	0
June	7.7	N.	42	SW.	2	15	6	5	4	10	7	6	7	0	5	12	13	11	9	0	0	0	1	0	0	9	0	10	0	0
July	7.2	SW.	30	NW.	0	12	8	4	2	11	19	4	1	1	12	12	7	9	6	0	0	0	6	1	0	13	0	10	0	0
August	6.4	E.	25	W.	0	8	12	14	6	9	6	6	0	0	14	11	6	6	5	0	0	0	4	0	0	21	0	7	0	0
September	7.7	S.	26	SW.	0	11	16	6	8	10	2	5	1	1	19	3	8	4	2	0	0	0	0	0	0	4	0	1	0	0
October	9.0	SW.	36	SW.	2	11	3	15	3	5	14	5	6	0	9	8	14	10	8	0	0	0	5	1	0	0	1	0	0	0
November	8.9	S.	33	SW.	1	11	5	5	4	9	8	6	11	1	9	7	14	10	8	5	3	0	6	3	1	0	12	1	0	0
December	9.0	SW.	29	SW.	0	8	4	9	3	8	13	9	8	0	4	4	23	13	11	4	2	0	14	6	7	0	20	0	0	0
Year	8.8	N.	43	SW.	13	132	87	92	54	110	102	75	72	6	97	106	162	128	100	28	14	2	68	17	14	52	86	52	0	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

FORT SMITH, ARK.
[$\phi=35^{\circ}22'$ N.; $\lambda=94^{\circ}24'$ W.]

Month	Pressure			Temperature										Moisture														
	Extremes			Mean							Extremes		Dew point			Relative humidity		Vapor pressure			Precipitation			Cloudiness				
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snow fall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight	
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	"	°	°	"	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>						
January.....	29.59	30.04	29.11	35.1	39.3	40.3	44.6	30.8	37.7	62	19	30	32	34	83	77	78	0.179	0.191	0.203	4.41	1.04	1.0	7.1	8.5	7.6	8.2	
February.....	29.57	30.12	28.89	37.9	46.3	47.5	53.4	33.2	43.3	77	23	30	28	27	72	50	46	.175	.169	.162	.89	.40	.3	5.3	6.0	5.2	5.5	
March.....	29.58	29.90	28.98	41.6	52.0	54.3	57.6	39.7	48.6	75	26	33	34	34	72	51	51	.195	.204	.213	2.37	1.11	T	6.5	4.9	4.7	5.0	
April.....	29.41	29.84	28.99	53.9	66.3	68.1	71.6	51.5	61.6	89	34	45	44	46	73	47	48	.324	.310	.339	2.88	1.54	T	5.7	4.7	4.5	5.0	
May.....	29.46	29.70	29.24	63.5	77.1	77.5	81.2	61.5	71.4	92	50	57	58	58	79	54	54	.465	.494	.501	3.86	1.96	.0	5.1	5.5	4.5	5.3	
June.....	29.45	29.69	29.10	72.7	85.0	86.5	90.4	70.7	80.6	100	60	66	67	66	80	56	53	.654	.661	.660	3.32	1.62	.0	4.4	4.9	4.2	4.6	
July.....	29.48	29.69	29.28	74.6	87.8	90.2	93.1	72.9	83.0	100	66	67	67	66	78	52	47	.673	.654	.649	3.24	1.69	.0	4.7	4.3	4.4	4.7	
August.....	29.49	29.71	29.30	75.1	90.1	89.9	94.8	74.4	84.5	107	68	70	69	69	84	52	51	.730	.719	.705	1.27	.43	.0	4.9	5.0	5.0	5.1	
September.....	29.56	29.86	29.29	65.4	80.6	78.9	84.5	64.6	74.6	96	45	61	61	62	86	54	58	.561	.568	.574	6.02	3.49	.0	5.2	4.5	3.9	4.8	
October.....	29.57	29.98	29.08	53.1	68.3	68.0	73.1	51.5	62.3	94	30	46	47	47	79	49	50	.336	.347	.353	2.39	.75	.0	3.8	4.0	3.4	3.8	
November.....	29.67	30.20	29.23	42.4	52.2	51.2	57.1	40.1	48.6	84	20	35	36	35	76	58	57	.222	.238	.221	3.98	3.03	.4	5.6	5.8	5.4	5.9	
December.....	29.69	30.04	29.13	38.0	44.1	43.5	48.5	34.9	41.7	64	14	33	35	34	81	71	70	.207	.226	.218	3.15	1.91	T	7.5	6.9	6.9	7.3	
Year.....	29.54	30.20	28.89	54.4	65.8	66.3	70.8	52.2	61.5	107	14	48	48	48	79	56	55	.393	.398	.400	37.78	3.49	1.7	5.5	5.4	5.0	5.4	

FORT WAYNE, IND.

[$\phi=41^{\circ}05'$ N.; $\lambda=85^{\circ}10'$ W.]

January.....	29.22	29.69	28.55	27.1	31.3	32.3	37.8	22.3	30.0	57	7	24	26	28	88	80	85	0.138	0.152	0.168	5.96	1.43	7.5	7.4
February.....	29.06	29.66	28.32	25.6	31.4	29.4	35.3	20.9	28.1	64	7	22	24	24	84	73	79	.125	.140	.133	1.41	.80	2.8	7.6
March.....	29.13	29.48	28.56	28.3	35.6	35.9	40.1	25.9	33.0	59	13	23	25	27	81	66	69	.126	.139	.149	1.42	.74	.8	6.2
April.....	29.00	29.49	28.37	41.6	52.4	50.9	57.1	39.1	48.1	50	28	36	38	39	80	62	66	.218	.249	.254	5.06	1.05	.5	6.2
May.....	29.08	29.32	28.83	55.0	66.3	65.0	70.1	50.8	60.4	91	40	46	49	49	73	56	58	.329	.368	.366	2.68	.59	.0	5.0
June.....	29.04	23.39	28.78	63.7	72.5	72.1	76.9	59.4	68.2	88	48	57	59	58	78	64	64	.473	.509	.495	4.44	.89	.0	6.0
July.....	29.08	29.27	28.79	67.9	79.4	77.9	83.6	63.9	73.8	93	48	60	60	61	76	54	58	.531	.543	.552	3.51	1.16	.0	3.1
August.....	29.15	29.36	28.90	68.1	81.0	79.6	84.6	65.6	75.1	92	59	63	62	64	83	55	60	.573	.569	.597	.96	.60	.0	3.7
September.....	29.17	29.47	28.73	55.3	69.4	66.8	72.8	52.9	62.8	91	40	49	49	51	80	49	58	.373	.377	.402	2.88	1.43	.0	4.0
October.....	29.11	29.60	28.37	45.0	55.1	52.0	58.2	42.6	50.4	85	28	41	40	41	85	58	67	.277	.269	.275	2.30	1.71	.4	5.5
November.....	29.15	29.72	28.54	32.4	40.9	38.8	45.4	28.8	37.1	70	12	28	30	30	84	69	73	.162	.177	.178	1.62	.86	2.3	5.9
December.....	29.19	29.67	28.73	24.0	29.0	29.1	32.2	21.4	26.8	51	4	22	24	25	89	80	83	.119	.136	.140	1.77	.66	1.8	6.5
Year.....	29.11	29.72	28.32	44.5	53.7	52.5	57.8	41.1	49.5	93	4	39	40	41	82	64	68	.287	.302	.309	34.01	1.71	16.1	5.6

FORT WORTH, TEX.

[$\phi=32^{\circ}95'$ N.; $\lambda=97^{\circ}20'$ W.]

January.....	29.33	29.76	28.86	36.8	42.0	-----	49.4	32.6	41.0	75	18	34	36	-----	90	81	-----	0.212	0.232	-----	1.71	0.76	4.2	7.6
February.....	29.34	29.89	28.67	42.8	54.3	-----	60.2	37.5	48.8	82	25	34	32	-----	71	44	-----	.214	.188	-----	.30	.17	.1	4.1
March.....	29.36	29.68	28.71	45.0	55.2	-----	60.6	42.6	51.6	76	28	39	38	-----	80	58	-----	.254	.254	-----	3.88	1.31	2.0	5.2
April.....	29.20	29.56	28.71	57.1	72.8	-----	77.5	55.0	66.2	92	39	50	47	-----	77	44	-----	.383	.360	-----	.58	.58	.0	4.1
May.....	29.24	29.51	28.90	66.0	80.6	-----	85.6	64.3	75.0	91	51	58	56	-----	77	44	-----	.496	.471	-----	1.00	.35	.0	4.6
June.....	29.22	29.43	28.83	73.8	86.9	-----	91.6	71.9	81.8	101	57	67	65	-----	80	50	-----	.660	.624	-----	5.74	3.06	.0	4.0
July.....	29.27	29.43	29.05	76.5	90.5	-----	94.9	75.1	85.0	101	69	67	65	-----	74	41	-----	.671	.625	-----	1.93	1.80	.0	3.4
August.....	29.26	29.50	29.02	77.1	93.6	-----	97.4	75.9	86.6	104	70	68	65	-----	74	41	-----	.688	.617	-----	1.02	.54	.0	3.2
September.....	29.30	29.56	29.04	69.1	86.5	-----	90.8	68.7	79.8	100	54	60	58	-----	74	40	-----	.545	.508	-----	.32	.15	.0	2.5
October.....	29.30	29.68	28.74	58.3	73.8	-----	78.3	56.5	67.4	97	37	50	49	-----	75	46	-----	.371	.346	-----	3.55	1.48	.0	3.6
November.....	29.40	29.89	28.74	46.8	57.4	-----	62.0	42.9	52.4	83	23	41	40	-----	80	55	-----	.287	.274	-----	4.39	2.69	5.0	4.6
December.....	29.42	29.78	28.90	42.4	48.7	-----	53.0	39.2	46.1	76	20	39	39	-----	89	72	-----	.265	.267	-----	5.31	1.46	.0	6.9
Year.....	29.30	29.89	28.67	57.6	70.2	-----	75.1	55.2	65.1	104	18	51	49	-----	78	51	-----	.420	.397	-----	29.73	3.06	11.3	4.5

FRESNO, CALIF.

[$\phi=36^{\circ}43'$ N.; $\lambda=119^{\circ}49'$ W.]

January.....	29.74	30.03	29.33	36.1	43.9	47.0	48.5	32.9	40.7	56	19	30	32	31	79	63	54	0.172	0.184	0.178	1.97	0.98	T	4.5	4.9	4.1	4.8
February.....	29.73	29.98	29.13	45.0	55.0	58.8	60.2	41.8	51.0	75	33	41	41	41	87	61	53	.264	.264	.263	2.46	.73	.0	3.7	6.5	5.4	5.5
March.....	29.65	29.92	29.15	49.3	61.3	64.6	66.5	46.1	56.3	80	39	45	44	43	85	55	48	.299	.293	.282	2.32	.86	.0	4.2	6.5	5.4	5.7
April.....	29.69	29.90	29.32	49.8	66.6	71.0	72.7	47.6	60.2	85	43	43	42	40	78	42	34	.281	.271	.253	.33	.24	.0	2.0	4.0	4.2	3.7
May.....	29.53	29.81	29.27	57.6	78.0	84.1	85.4	55.7	70.6	99	47	45	44	40	65	31	22	.302	.295	.256	.0	.0	.0	2.5	2.9	4.2	3.2
June.....	29.55	29.77	29.32	63.2	82.1	88.3	89.7	61.4	75.6	109	55	50	50	46	63	34	24	.357	.367	.311	T	T	.0	1.6	2.9	3.6	2.9
July.....	29.50	29.65	29.24	70.2	91.5	97.2	98.5	68.2	83.4	108	58	51	51	45	52	26	18	.375	.379	.310	T	T	.0	1.4	1.7	2.5	2.1
August.....	29.51	29.68	29.31	68.4	91.2	97.0	98.4	66.2	82.3	106	57	50	49	44	52	25	17	.362	.360	.295	.0	.0	.0	.8	.2	.6	.4
September.....	29.54	29.77	29.35	62.5	83.5	88.8	90.1	60.3	75.2	105	53	51	50	47	67	33	25	.372	.371	.325	T	T	.0	1.1	.6	.7	.8
October.....	29.62	29.76	29.47	57.3	75.9	80.4	82.0	53.8	67.9	92	48	48	49	45	72	40	31	.333	.351	.313	.11	.08	.0	1.1	1.4	1.8	1.9
November.....	29.73	29.89	29.58	48.6	63.3	66.4	68.6	45.4	57.0	80	37	45	46	45	87	55	48	.297	.316	.304	.05	.03	.0	2.0	4.3	3.9	4.2
December.....	29.75	30.03	29.42	45.8	55.1	57.0	59.2	42.3	50.8	72	34	43	44	45	91	70	67	.285	.300	.302	3.00	1.62	.0	3.3	5.5	5.2	5.4
Year.....	29.63	30.03	29.13	54.5	70.6	75.0	76.6	51.8	64.2	109	19	45	45	43	73	45	37	.308	.313	.283	10.24	1.62	T	2.4	3.4	3.5	3.4

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

FORT SMITH, ARK.

[H=449 ft.; H_b=463 ft.; h_t=57 ft.; h_r=48 ft.; h_a=82 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m. and 7:30 p. m., winds observed from											Precipitation	Snow		Fog		Maximum temperature 32° or below		Electricity					
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	8.7	E.	25	W.	0	4	6	28	1	2	7	6	8	0	3	4	24	13	11	2	1	0	12	4	3	0	17	1	0
February	10.2	E.	31	W.	0	6	3	15	4	4	10	3	11	0	9	9	10	4	4	2	1	0	2	2	0	0	15	1	0
March	8.9	E.	30	SW.	0	11	5	22	1	2	7	2	12	0	11	12	8	10	6	3	0	3	0	0	0	6	4	0	0
April	9.9	E.	37	W.	3	4	6	18	1	6	10	6	9	0	11	13	6	7	6	1	0	0	1	0	0	0	7	0	0
May	8.0	E.	22	W.	0	7	9	20	2	5	11	2	6	0	10	14	7	9	7	0	0	2	0	0	6	0	9	0	0
June	6.6	E.	24	W.	0	6	13	18	2	4	8	3	3	3	11	13	6	9	5	0	0	1	0	0	0	18	0	8	0
July	7.5	E.	24	SW.	0	5	4	29	3	8	9	4	0	0	10	17	4	8	7	0	0	0	0	0	0	23	0	8	0
August	6.6	E.	19	NE.	0	1	8	33	3	2	11	3	1	0	9	16	6	8	5	0	0	0	0	0	0	26	0	5	0
September	6.9	E.	24	N.	0	4	6	32	7	4	0	4	3	0	14	6	10	14	11	0	0	0	0	0	0	10	0	13	0
October	6.9	E.	22	W.	0	4	8	24	2	3	6	9	5	1	18	7	6	9	6	0	0	0	1	1	0	2	1	2	0
November	8.3	E.	22	S.	0	11	6	22	4	3	8	9	3	0	8	10	12	8	6	6	1	0	1	0	0	0	10	1	0
December	7.4	E.	19	NW.	0	8	3	27	1	2	3	11	7	0	3	10	18	13	6	2	0	0	6	2	2	0	11	0	0
Year	8.0	E.	37	W.	3	71	77	288	31	45	84	62	68	4	117	131	117	112	80	16	3	1	28	9	5	85	60	59	0

FORT WAYNE, IND.

[H=777 ft.; H_b=857 ft.; h_t=69 ft.; h_r=63 ft.; h_a=84 ft.]

January	10.2	W.	30	S.	0	3	5	9	3	8	9	15	9	1	9	4	18	15	14	7	4	0	15	5	9	0	28	2	0		
February	12.0	W.	35	SW.	2	6	3	4	3	9	7	19	5	0	4	9	15	10	8	18	5	1	4	1	13	0	25	2	2		
March	9.7	NW.	21	NW.	0	8	5	5	0	1	7	11	25	0	6	12	13	8	5	11	3	1	6	2	6	0	27	2	0		
April	10.6	NW.	31	W.	0	4	8	12	4	5	7	8	12	0	3	14	13	17	14	3	1	1	4	0	0	0	6	6	0		
May	8.1	NW.	30	W.	0	7	4	6	5	12	6	3	18	1	11	9	11	14	12	0	0	1	4	0	0	1	0	6	0		
June	8.2	NW.	31	SW.	0	9	7	4	1	10	8	6	13	2	6	12	12	16	13	0	0	0	2	0	0	0	9	0			
July	7.2	SW.	38	W.	1	4	7	3	2	4	21	8	11	2	8	18	5	9	7	0	0	0	0	0	0	7	0	10	0		
August	6.5	NE.	27	W.	0	2	19	4	9	4	12	4	7	1	13	11	7	8	7	0	0	0	1	1	0	4	0	6	2		
September	7.8	S.	31	SW.	0	8	10	3	6	17	5	2	8	1	10	14	6	6	4	0	0	1	0	0	1	0	4	0			
October	9.1	NW.	37	SW.	1	3	6	8	4	3	15	7	16	0	4	12	15	10	5	2	2	0	8	1	0	0	4	2	0		
November	10.7	W.	30	NW.	0	0	4	2	2	11	16	20	5	0	7	8	15	12	10	10	6	0	4	2	9	0	17	0			
December	9.3	W.	27	W.	0	2	5	3	3	7	8	28	6	0	4	3	24	16	9	10	7	0	11	3	14	0	30	0			
Year	9.1	W.	38	W.	4	56	83	63	42	91	121	131	135	8	85	126	154	141	108	61	28	4	60	15	51	13	137	49	0		

FORT WORTH, TEX.

[H=616 ft.; H_b=679 ft.; h_t=92 ft.; h_r=85 ft.; h_a=110 ft.]

January	9.3	N.	29	N.	0	14	0	3	3	5	4	2	0	0	2	5	24	13	9	5	3	0	13	5	5	0	19	2	0		
February	12.1	N.	38	N.	4	9	1	2	7	6	2	0	0	0	16	6	6	2	2	1	1	0	0	0	0	0	8	2	0		
March	11.1	N.	31	W.	0	11	1	3	4	6	3	2	1	0	13	6	12	10	10	1	1	1	5	1	0	0	5	7	0		
April	12.8	S.	38	N.	4	7	0	2	3	15	1	2	0	0	17	6	7	2	1	0	0	0	0	0	0	3	0	3	0		
May	10.8	S.	32	SW.	1	9	0	2	4	12	0	3	1	0	16	10	5	6	5	0	0	0	0	0	0	5	0	8	0		
June	9.1	S.	36	N.	1	1	0	4	3	12	6	4	0	0	17	11	2	8	6	0	0	2	1	0	0	22	0	10	C		
July	9.9	S.	25	S.	0	2	0	4	2	17	5	1	0	0	19	10	2	4	3	0	0	0	0	0	0	28	0	3	0		
August	8.5	S.	31	SE.	0	1	2	6	5	13	3	1	0	0	19	11	1	7	5	0	0	0	0	0	0	29	0	9	0		
September	8.3	S.	27	SE.	0	4	0	6	4	8	4	1	1	2	18	10	2	4	4	0	0	0	0	0	0	17	0	4	0		
October	8.7	N.	32	N.	1	5	1	6	2	5	6	4	1	1	20	3	8	6	6	0	0	0	0	0	0	4	0	2	0		
November	9.9	N.	40	N.	3	10	0	3	2	12	2	1	0	0	15	7	8	5	4	1	1	0	0	0	0	0	10	3	0		
December	8.6	N.	27	N.	0	13	1	2	4	2	3	3	3	0	6	3	22	15	11	0	0	0	8	6	1	0	7	0	0		
Year	9.9	S.	40	N.	14	86	6	42	38	114	43	26	7	3	178	88	99	86	66	9	6	4	27	12	6	108	49	53	0		

FRESNO, CALIF.

[H=287 ft.; H_b=327 ft.; h_t=97 ft.; h_r=89 ft.; h_a=105 ft.]

January	6.3	NW.	21	NW.	0	4	8	9	12	5	5	1	18	0	14	8	9	10	7	2	0	3	4	3	0	0	12	0	0
February	6.2	NW.	24	SE.	0	1	7	14	6	4	6	2	15	1	8	8	12	9	9	0	0	1	3	1	0	0	0	0	0
March	5.6	NW.	25	NW.	0	5	7	11	7	4	4	5	14	5	8	12	11	8	8	0	0	1	4	4	0	0	0	0	0
April	6.8	NW.	31	NW.	0	2	4	5	1	1	3	2	41	1	14	12	4	5	3	0	0	0	1	0	0	0	0	1	0
May	7.5	NW.	20	NW.	0	11	1	3	0	0	1	2	41	3	19	9	3	0	0	0	0	0	0	0	0	9	0	0	0
June	8.0	NW.	26	NW.	0	4	5	0	0	0	1	4	45	0	19	7	4	0	0	0	0	0	0	0	0	13	0	1	0
July	6.9	NW.	18	NW.	0	8	2	2	0	1	1	12	33	3	23	5	3	0	0	0	0	0	0	0	0	29	0	1	0
August	6.4	NW.	16	NW.	0	5	1	0	1	1	1	10	42	1	31	0	0	0	0	0	0	0	0	0	0	29	0	0	0
September	6.2	NW.	18	NW.	0	8	2	1	2	6	1	10	33	3	28	1	1	0	0	0	0	0	0	0	0	14	0	0	0
October	5.2	NW.	17	W.	0	10	4	10	2	2	3	1	24	6	24	5	2	2	1	0	0	0	2	0	0	4	0	1	0
November	4.9	NW.	14	NW.	0	8	7	9	7	2	2	3	19	3	14	10	6	3	0	0	0	0	9	4	0	0	0	0	0
December	4.8	NW.	20	SE.	0	4	2	16	6	0	6	6	18	4	12	6	13	6	6	0	0	0	10	9	0	0	0	0	0
Year	6.2	NW.	31	NW.	0	70	50	80	44	21	34	58	343	30	214	83	68	43	34	2	0	5	33	21	0	98	12	4	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

GALVESTON, TEX.

[$\phi=29^{\circ} 18' N.$; $\lambda=94^{\circ} 50' W.$]

Month	Pressure			Temperature								Moisture																
	Extremes			Mean				Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation			Cloudiness									
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight	
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>
January	29.97	30.27	29.63	56.5	58.6	58.2	62.5	52.0	57.2	72	37	55	55	56	95	89	92	0.458	0.462	0.464	3.34	1.16	0.0	8.7	7.9	7.5	8.2	
February	30.02	30.51	29.55	55.2	59.0	59.3	63.1	52.6	57.8	76	38	49	51	51	81	77	75	3.74	.408	.401	1.22	.53	.0	6.4	6.5	5.9	6.9	
March	29.99	30.35	29.62	56.2	59.7	59.4	63.3	53.5	58.4	75	40	52	52	53	86	78	79	.409	.419	.420	3.32	1.45	.0	7.3	6.4	6.9	7.2	
April	29.89	30.25	29.53	64.0	69.5	68.5	72.0	62.6	67.3	82	48	60	61	62	88	76	81	.542	.560	.577	1.07	.58	.0	4.9	4.8	3.9	4.3	
May	29.92	30.07	29.72	73.0	75.5	76.9	80.5	72.0	76.2	84	65	67	67	68	82	69	75	.670	.676	.697	1.10	.09	.0	3.0	2.6	2.4	2.6	
June	29.90	30.12	29.59	79.8	85.3	83.1	87.4	78.4	82.9	93	65	74	75	74	83	72	74	.842	.867	.831	1.18	1.03	.0	3.5	4.0	3.5	5.1	
July	29.95	30.09	29.76	81.5	86.2	84.2	88.1	80.0	84.0	90	72	74	74	74	78	64	72	.840	.840	.840	2.02	1.30	.0	3.3	2.3	3.4	3.5	
August	29.92	30.12	29.74	80.9	86.0	84.7	88.5	79.9	84.2	92	72	75	74	75	83	68	73	.869	.843	.868	3.24	1.53	.0	4.3	3.1	4.0	4.5	
September	29.93	30.18	29.77	77.6	83.5	81.8	85.8	75.5	80.6	94	65	70	70	69	78	64	66	.746	.738	.722	6.10	2.81	.0	3.2	2.6	3.3	2.8	
October	29.94	30.18	29.61	68.9	75.1	73.9	78.2	66.8	72.5	86	48	63	63	63	82	67	72	.604	.607	.622	2.95	2.42	.0	2.5	2.1	2.4	2.5	
November	30.05	30.45	29.65	57.4	62.0	60.8	66.0	54.1	60.0	78	33	52	52	53	82	72	77	.423	.430	.447	2.93	1.13	.0	4.3	4.9	3.5	4.2	
December	30.07	30.38	29.59	53.1	56.7	55.7	59.2	50.3	54.8	68	32	49	50	50	87	80	84	.374	.394	.392	4.41	2.24	.0	4.8	6.9	5.9	7.3	
Year	29.96	30.51	29.53	67.0	71.7	70.5	74.6	64.8	69.7	94	32	62	62	62	84	73	77	.596	.604	.607	31.88	2.81	.0	4.7	4.5	4.4	4.9	

GRAND JUNCTION, COLO.

[$\phi=39^{\circ} 04' N.$; $\lambda=108^{\circ} 34' W.$]

January	25.30	25.76	24.78	8.9	21.7	20.8	25.6	4.5	15.0	42	-14	6	12	12	88	62	65	0.060	0.072	0.073	0.78	0.32	8.4	4.5	4.0	3.9	4.3
February	25.38	25.86	24.58	23.3	35.4	36.5	40.3	19.9	30.1	53	-2	18	20	21	77	54	52	.099	.110	.115	.66	.25	3.7	3.1	5.7	4.9	4.9
March	25.32	25.77	24.81	34.9	50.0	51.4	55.4	32.7	44.0	66	25	26	24	25	68	37	37	.139	.130	.136	.67	.31	2.5	4.2	4.7	5.0	4.8
April	25.28	25.66	24.76	42.3	58.7	60.7	64.3	37.3	50.8	84	30	34	35	24	49	28	26	.126	.134	.124	.22	.15	T	3.9	5.1	6.3	5.1
May	25.29	25.66	24.90	54.0	74.0	76.4	80.0	52.4	66.2	91	38	35	38	33	50	29	23	.211	.234	.194	.30	.23	.0	3.4	4.7	5.9	4.9
June	25.34	25.53	25.06	59.1	79.2	81.5	85.0	67.0	71.0	96	40	39	40	34	49	27	21	.243	.259	.211	.14	.03	.0	2.6	4.5	5.3	4.0
July	25.42	25.60	25.26	67.2	85.0	87.4	91.3	66.0	78.5	100	60	51	53	48	58	37	31	.380	.407	.348	.94	.31	.0	3.9	3.3	4.7	3.9
August	25.42	25.65	25.26	65.8	85.4	88.6	91.7	64.2	78.0	98	57	48	50	47	54	32	27	.342	.363	.338	1.00	.49	.0	1.9	3.3	3.9	3.4
September	25.43	25.72	25.21	58.4	76.4	79.7	82.8	56.0	69.4	91	42	42	45	42	57	35	29	.283	.311	.275	.93	.52	.0	2.7	3.8	2.7	3.3
October	25.44	25.69	25.11	46.6	64.5	65.7	69.5	43.2	56.4	81	32	34	35	34	62	34	34	.195	.204	.204	.94	.84	.0	2.3	2.6	2.5	2.8
November	25.44	25.73	25.08	35.5	50.5	50.1	55.3	32.7	44.0	66	18	28	30	29	74	46	46	.156	.169	.164	.42	.33	T	3.0	4.0	3.2	4.0
December	25.46	25.88	24.94	28.3	38.3	37.6	42.0	24.7	33.4	54	12	24	27	28	83	65	68	.130	.147	.151	1.63	.80	5.9	5.7	6.1	4.3	5.9
Year	25.38	25.88	24.58	43.7	59.9	61.4	65.3	40.9	53.1	100	-14	31	33	31	64	40	38	.197	.212	.194	8.63	.84	20.5	3.4	4.3	4.4	4.3

GRAND RAPIDS, MICH.

[$\phi=42^{\circ} 58' N.$; $\lambda=85^{\circ} 40' W.$]

January	29.34	29.86	28.56	24.8	29.2	28.6	36.0	21.1	28.6	55	13	20	22	23	80	74	78	0.110	0.124	0.129	2.15	0.79	6.3	6.7	7.4	6.3	7.6
February	29.16	29.85	28.35	24.8	29.1	28.6	33.7	20.6	27.2	56	8	20	22	22	82	73	74	.117	.126	.122	1.62	.70	12.0	8.0	7.8	6.5	7.5
March	29.29	29.64	28.84	26.5	34.4	32.5	38.1	24.3	31.2	58	11	22	21	22	81	59	65	.120	.117	.122	1.10	.68	3.9	5.7	6.3	5.1	6.0
April	29.16	29.60	28.50	39.1	50.0	48.8	54.4	37.2	45.8	72	28	34	35	36	80	58	64	.197	.213	.221	4.78	1.21	.9	5.7	8.3	6.6	7.4
May	29.23	29.49	28.91	53.0	65.7	64.2	69.6	49.9	59.8	90	35	45	45	46	75	49	54	.317	.318	.336	1.86	.63	.0	5.6	5.5	5.7	5.7
June	29.19	29.56	28.94	62.1	72.6	71.0	76.5	58.3	67.4	92	48	55	55	54	78	56	58	.448	.448	.442	4.68	1.49	.0	6.5	5.7	5.3	5.5
July	29.21	29.40	28.84	67.6	80.7	79.5	84.8	63.8	74.3	95	49	60	59	59	78	49	50	.638	.615	.612	1.33	.37	.0	4.0	4.1	4.3	4.0
August	29.30	29.50	29.03	68.4	82.1	79.9	86.4	65.6	76.0	94	53	62	61	62	81	52	56	.667	.654	.669	4.11	1.50	.0	3.9	4.9	4.6	4.5
September	29.31	29.64	28.74	55.6	68.6	66.1	73.4	53.0	63.2	92	38	49	50	50	79	53	58	.372	.388	.391	2.44	1.54	.0	4.5	4.9	4.4	4.8
October	29.24	29.79	28.35	44.9	53.0	49.8	56.1	41.9	49.0	79	28	39	39	40	82	61	70	.258	.263	.272	2.95	1.13	T	7.0	7.4	6.3	7.1
November	29.25	29.80	28.60	34.6	40.7	38.3	45.0	30.8	37.9	65	19	30	30	29	81	67	68	.170	.177	.162	1.97	.49	4.4	7.4	7.0	5.6	7.1
December	29.31	29.85	28.83	25.0	29.3	27.8	31.5	21.7	26.6	43	6	22	23	23	85	77	82	.118	.127	.127	2.00	.51	14.9	8.0	9.3	8.1	8.9
Year	29.25	29.86	28.35	43.9	53.0	51.3	57.1	40.7	48.9	95	6	38	38	39	80	61	65	.278	.281	.284	30.99	1.54	42.4	6.1	6.6	5.7	6.3

GREEN BAY, WIS.

[$\phi=44^{\circ} 31' N.$; $\lambda=88^{\circ} 00' W.$]

January	29.40	29.99	28.51	12.1	17.4	18.9	25.4	5.1	15.2	38	-14	7	10	13	79	71	76	0.069	0.080	0.089	2.43	0.71	12.8	5.8	6.9	4.8	6.4
February	29.23	29.98	28.41	16.0	22.3	22.7	27.7	11.4	19.6	43	-11	12	13	16	84	66	73	.086	.090	.096	2.33	1.41	6.1	5.6	6.2	6.0	6.4
March	29.41	29.73	28.91	22.7	30.4	30.8	35.0	20.5	27.8	47	2	17	17	19	78	57	61	.098	.098	.107	.44	.27	4.2	4.3	5.2	5.4	4.9
April	29.25	29.67	28.79	37.5	45.2	44.9	48.8	34.7	41.8	67	25	32	31	33	78	61	65	.181	.181	.193	3.42	1.27	.2	6.6	6.8	6.2	6.4
May	29.31	29.62	28.90	51.2	61.9	61.5	67.0	46.8	56.9	90	32	42	41	43	72	48	53	.287	.280	.299	1.12	.50	.0	5.9	5.8	5.6	5.7
June	29.28	29.65	28.95	60.7	70.0	70.7	75.2	56.1	65.6	95	42	51	50	52	71	50	52	.387	.379	.406	1.39	.39	.0	6.0	6.8	5.3	6.4
July	29.28	29.52	28.90	67.0	79.0	77.9	83.4	62.6	73.0	97	49	58	56	56	74	48	49	.501	.472	.474	2.15	.81	.0	5.0	4.5	4.4	4.6
August	29.36	29.63	29.07	67.2	81.1	78.7	85.6	63.8	74.7	98	49	60	59	60	77	50	56	.515	.510	.535	2.62	1.04	.0	3.9	5.0	4.0	4.6
September	29.38	29.70	28.83	55.0	67.7	64.2	71.7	51.4	61.6	94	37	48	48	49	77	53	60	.354	.371	.367	2.84	1.94	.0	4.2	6.2	6.0	5.5
October	29.32	29.86	28.11	40.9	49.0	47.8	53.2	38.3	45.8	77	26	35	35	37	80	60	67	.220	.226	.240	2.30	1.07	T	5.4	7.7	6.7	7.1
November	29.31	29.91	28.55	30.2	35.8	34.3	39.6	27.2	33.4	60	5	24	22	24	76	61	66	.136	.136	.140	1.91	1.12	.5	6.9	7.3	5.1	6.9
December	29.39	29.98	28.80	20.0	23.3	22.3	27.0	14.4	20.7	38	-3	16	16	17	83	72	77	.095	.095	.098	.85	.31	6.4	7.3	7.8	6.8	7.9
Year	29.33	29.99	28.11	40.0	48.6	47.9	53.3	36.0	44.7	98	-14	34	33	35	77	58	63	.244	.243	.254	23.80	1.94	30.2	5.6	6.5	5.6	6.2

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

GALVESTON, TEX.

[H=6 ft.; H_b=54 ft.; h_i=106 ft.; h_r=98 ft.; h_a=114 ft.]

Monthly	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., wind observed from																								
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature 32° or below	Thunderstorm	Aurora	
January	11.6	N.	26	S.	0	20	5	10	10	11	0	0	6	0	2	7	22	16	10	0	0	0	26	10	0	0	0	0	1	0
February	12.5	S.	33	NW.	1	17	3	6	8	14	5	1	2	0	0	7	5	16	8	5	0	0	12	3	0	0	0	0	0	0
March	11.7	N.	35	NW.	1	13	7	7	12	18	0	1	3	1	7	6	18	10	6	0	0	0	18	2	0	0	0	0	3	0
April	11.9	S.	29	NW.	0	5	1	4	15	27	3	0	4	1	12	14	4	5	3	9	0	1	13	5	0	0	0	1	0	0
May	11.4	S.	25	SE.	0	4	0	1	11	38	4	3	1	0	22	6	3	2	1	0	0	0	1	1	0	0	0	0	0	0
June	10.8	S.	33	NW.	1	3	0	1	5	42	4	5	0	0	11	15	4	5	4	0	0	0	0	0	0	0	6	0	5	0
July	11.1	S.	23	SE.	0	0	1	1	12	41	4	3	0	0	20	8	3	7	4	0	0	0	0	0	0	0	0	0	3	0
August	9.3	S.	21	SE.	0	1	1	3	9	37	4	4	3	0	13	16	2	10	8	0	0	0	0	0	0	0	4	0	11	0
September	8.5	S.	22	W.	0	11	2	9	8	19	4	3	3	1	21	4	5	11	8	0	0	0	1	0	0	3	0	4	0	0
October	10.0	S.	30	S.	0	13	5	7	5	19	6	2	4	1	22	6	3	7	5	0	0	0	1	1	0	0	0	0	2	0
November	11.5	N.	35	NW.	1	11	9	6	11	11	1	3	7	1	12	14	4	6	6	0	0	0	6	1	0	0	0	0	3	0
December	11.3	E.	27	S.	0	8	5	20	14	6	2	1	5	1	6	4	21	13	9	0	0	0	14	10	0	0	0	0	0	0
Year	11.0	S.	35	NW.	4	106	39	75	120	283	37	26	38	6	155	105	105	100	69	0	0	1	92	33	0	13	0	33	0	0

GRAND JUNCTION, COLO.

[H=4,587 ft.; H_b=4,602 ft.; h_i=60 ft.; h_r=52 ft.; h_a=68 ft.]

January	4.8	N.	34	S.	1	24	6	3	3	2	1	2	21	0	15	9	7	7	5	14	7	0	0	0	23	0	31	0	0	0
February	5.6	NW.	28	W.	0	12	2	4	8	2	1	4	23	0	11	7	10	5	4	8	3	0	0	0	6	0	28	0	0	0
March	7.3	SE.	30	S.	0	21	2	5	11	6	1	5	10	1	11	11	9	8	4	4	2	0	0	0	0	0	15	0	0	0
April	7.8	SE.	32	SW.	1	14	2	1	16	2	4	10	11	0	9	12	9	2	2	4	1	0	0	0	0	0	5	0	0	0
May	7.9	SE.	33	NW.	1	12	2	6	17	7	3	7	8	0	9	16	6	3	2	0	0	0	0	0	0	1	0	7	0	0
June	7.4	SE.	27	SW.	0	10	4	5	17	8	5	3	8	0	14	11	5	6	0	0	0	0	0	0	0	12	0	5	0	0
July	6.9	SE.	27	SW.	0	9	2	3	25	9	1	1	12	0	16	9	6	7	5	0	0	0	0	0	0	21	0	11	0	0
August	7.1	SE.	27	S.	0	15	3	3	25	8	0	1	7	0	16	13	2	9	6	0	0	0	0	0	0	24	0	7	0	0
September	6.5	SE.	27	SE.	0	15	2	4	21	7	0	4	7	0	17	8	5	6	3	0	0	0	0	0	0	4	0	4	0	0
October	6.1	SE.	23	S.	0	16	3	1	22	7	0	5	8	0	20	8	3	4	4	0	0	0	0	0	0	0	0	2	0	0
November	5.3	SE.	23	SW.	0	10	2	0	16	8	3	7	14	0	17	4	9	5	3	1	1	0	1	0	0	0	13	2	0	0
December	4.8	SE.	21	SW.	0	8	4	5	19	6	2	2	16	0	9	10	12	7	4	10	6	0	3	1	0	0	27	0	0	0
Year	6.5	SE.	34	S.	3	166	34	40	200	72	21	51	145	1	164	118	83	69	42	41	20	0	4	1	29	62	119	38	0	0

GRAND RAPIDS, MICH.

[H=638 ft.; H_b=707 ft.; h_i=70 ft.; h_r=70 ft.; h_a=244 ft.]

January	13.4	W.	43	SW.	8	6	3	6	9	8	13	12	5	0	6	3	22	14	9	17	7	0	8	1	10	0	30	0	0	0
February	13.1	SW.	37	SW.	4	2	4	5	9	7	14	5	10	0	5	3	20	11	9	21	9	0	7	1	15	0	24	2	0	2
March	11.6	N.	34	NE.	1	12	12	0	3	2	8	14	11	0	9	8	14	8	4	17	6	0	4	0	7	0	28	1	0	0
April	12.6	SE.	43	W.	4	11	3	13	9	6	7	2	9	0	5	8	17	15	11	6	2	1	8	1	0	0	7	5	0	0
May	9.8	SW.	30	SW.	0	5	9	4	9	9	7	12	7	0	8	13	10	14	9	0	0	0	3	0	0	2	0	4	1	0
June	9.6	N.	43	SW.	2	15	6	3	6	7	8	11	4	0	9	9	12	11	9	0	0	1	3	0	0	1	0	7	0	0
July	9.0	SW.	33	SW.	1	6	3	3	5	7	16	14	7	1	15	8	8	9	6	0	0	0	2	1	0	8	0	7	0	0
August	7.3	SW.	24	SW.	0	4	8	6	15	8	10	7	3	1	12	11	8	11	9	0	0	0	3	0	0	9	0	7	2	0
September	10.5	SW.	39	S.	3	9	5	6	7	15	9	3	6	0	11	11	8	11	5	0	0	0	3	0	0	2	0	6	0	0
October	10.9	N.	53	SW.	2	10	4	5	8	8	9	8	10	0	4	11	16	11	8	5	0	0	7	0	0	0	4	0	4	0
November	13.0	SW.	48	SW.	3	3	2	4	6	8	19	5	13	0	4	8	18	12	8	11	5	0	4	1	5	0	16	2	1	0
December	10.6	W.	31	SW.	0	6	5	4	8	10	12	11	6	0	1	4	26	15	13	21	13	0	8	1	12	0	31	0	0	0
Year	10.9	SW.	53	SW.	28	89	64	59	94	95	132	104	91	2	89	97	179	142	100	98	42	2	60	6	49	22	140	41	10	0

GREEN BAY, WIS.

[H=589 ft.; H_b=617 ft.; h_i=109 ft.; h_r=101 ft.; h_a=141 ft.]

January	11.8	SW.	32	SW.	1	5	7	1	5	10	22	10	2	0	10	5	16	8	7	16	6	0	5	0	19	0	31	0	0	0	0		
February	11.8	SW.	29	W.	0	5	2	3	3	9	15	13	6	0	9	3	16	10	6	15	7	0	3	1	19	0	26	2	0	0	0	0	
March	11.1	N.	38	NE.	1	13	4	4	2	7	9	12	11	0	13	10	8	3	2	14	3	0	1	0	10	0	30	0	0	0	0	0	
April	12.2	NE.	40	N.	1	7	21	6	6	7	5	4	3	1	5	5	20	14	11	5	2	0	0	0	0	0	9	3	2	0	0	0	
May	10.9	S.	31	W.	0	12	4	6	10	9	6	11	4	0	6	11	14	10	5	0	0	0	1	0	0	0	0	5	3	0	0	0	
June	9.8	S.	37	SW.	1	10	3	3	12	12	7	6	6	1	4	13	13	11	7	0	0	0	1	0	0	0	1	0	6	2	0	0	
July	9.7	S.	31	NW.	0	2	5	8	9	13	12	5	8	0	11	15	5	7	5	0	0	0	1	0	0	6	0	9	0	0	0	0	
August	9.3	S.	29	SW.	0	4	7	7	9	22	4	4	4	1	15	6	10	5	5	0	0	0	2	1	0	0	3	0	4	0	0	0	
September	10.5	S.	30	N.	0	5	2	5	6	19	9	4	10	0	8	11	11	10	7	0	0	0	0	0	0	0	8	0	5	0	0	0	
October	10.2	NW.	30	W.	0	6	4	4	9	12	3	11	13	0	3	11	17	11	6	3	0	0	6	3	0	0	8	0	5	0	0	0	
November	12.7	SW.	35	SW.	2	1	2	1	7	10	14	11	14	0	8	5	17	7	6	10	2	1	2	1	9	0	19	3	0	0	0	0	
December	10.2	SW.	26	W.	0	4	8	2	3	5	22	10	8	0	6	1	24	7	4	20	6	0	4	3	19	0	31	0	0	0	0	0	0
Year	10.8	S.	40	N.	6	74	69	50	81	135	128	101	89	3	98	96	171	103	71	83	26	1	26	9	76	20	154	37	12				

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

GREENSBORO, N. C.

[$\phi=36^{\circ}05' N.$; $\lambda=79^{\circ}57' W.$]

Month	Pressure			Temperature								Moisture															
	Extremes			Mean						Extremes		Dew point	Relative humidity	Vapor pressure			Precipitation			Cloudiness							
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight			
	In.	In.	In.	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.	In.	In.	In.		
January	29.27	29.66	28.81	44.0	48.8	46.4	52.5	39.6	46.0	70	28	41	44	43	91	84	89	0.279	0.309	0.296	8.24	1.85	0.0	9.4	9.5	8.7	9.3
February	29.07	29.52	28.42	34.2	44.4	41.7	48.6	30.0	39.3	71	16	28	28	32	78	55	68	.170	.174	.197	2.55	.91	4.0	6.0	6.2	6.1	6.4
March	29.03	29.50	28.67	35.7	52.1	49.1	57.7	32.5	45.1	71	11	30	32	34	80	49	57	.177	.194	.205	1.51	.75	1.7	4.3	3.4	3.9	3.8
April	29.02	29.44	28.62	48.9	62.3	60.6	67.3	44.0	55.6	88	29	42	41	43	79	51	60	.283	.277	.294	4.94	2.41	.0	5.3	5.6	5.4	5.5
May	29.06	29.42	28.81	59.8	74.8	70.9	79.5	53.4	66.4	93	37	53	51	54	78	45	56	.417	.398	.427	3.06	1.86	.0	4.7	4.5	3.5	4.3
June	29.02	29.28	28.72	70.7	83.5	77.1	87.3	65.3	76.3	95	60	66	63	65	84	52	67	.631	.589	.622	3.59	1.21	.0	6.0	5.5	6.7	5.9
July	29.08	29.27	28.90	70.2	83.4	76.8	86.7	65.5	76.1	96	55	66	64	66	86	54	72	.639	.616	.653	2.75	1.20	.0	4.8	5.9	6.1	5.5
August	29.15	29.40	28.98	70.5	83.9	76.1	87.2	67.5	77.4	93	60	69	68	69	92	60	81	.703	.692	.719	5.16	1.60	.0	5.2	6.2	6.5	6.0
September	29.14	29.53	28.75	59.0	72.9	66.1	76.4	56.2	66.3	90	46	56	56	60	93	58	81	.473	.468	.528	2.43	1.56	.0	4.9	4.9	3.9	4.9
October	29.10	29.63	28.55	47.9	62.7	55.7	65.8	44.6	55.2	85	29	44	45	48	86	56	76	.314	.335	.359	4.91	1.71	.0	5.5	5.7	5.5	5.7
November	29.16	29.72	28.63	36.8	53.1	45.2	56.0	32.6	44.3	72	15	32	33	36	82	49	70	.195	.208	.228	2.14	1.23	.0	4.4	4.8	3.7	4.3
December	29.20	29.63	28.67	32.6	43.8	39.5	47.5	29.7	38.6	65	14	29	30	32	85	60	74	.169	.185	.194	1.28	.51	T	6.0	6.3	5.9	6.0
Year	29.11	29.72	28.42	50.9	63.8	58.8	67.7	46.7	57.2	96	11	46	46	48	84	56	71	.371	.370	.394	42.56	2.41	5.7	5.5	5.7	5.5	5.6

HARRISBURG, PA.

[$\phi=40^{\circ}16' N.$; $\lambda=76^{\circ}52' W.$]

January	29.84	30.41	29.22	34.8	37.9	38.8	43.9	31.5	37.7	67	22	30	31	31	81	76	74	0.172	0.179	0.180	5.34	0.82	3.7	8.0	8.7	7.4	8.7
February	29.60	30.07	29.04	29.6	34.9	35.4	39.9	26.1	33.0	58	17	22	21	22	71	57	58	.122	.120	.128	3.16	1.66	4.5	6.6	5.8	4.4	6.1
March	29.55	30.04	29.11	32.8	39.5	40.0	44.5	30.6	37.6	62	18	22	23	24	63	52	55	.118	.125	.136	1.45	.62	9.5	6.3	5.8	4.5	5.8
April	29.58	30.06	29.14	44.7	52.9	52.7	57.8	41.5	49.6	84	33	34	33	34	67	50	53	.204	.198	.209	4.58	1.23	T	6.2	6.0	7.0	6.4
May	29.57	30.02	29.25	57.4	69.3	67.0	74.3	52.6	63.4	92	43	48	48	48	71	48	55	.348	.349	.358	3.19	.99	.0	3.4	5.0	4.7	4.4
June	29.51	29.82	29.10	67.7	76.6	74.5	81.3	63.0	72.2	94	56	60	59	59	76	56	62	.515	.506	.516	7.14	1.75	.0	5.8	5.8	5.9	5.6
July	29.58	29.78	29.30	69.7	79.4	77.3	84.0	65.5	74.8	96	55	62	61	62	77	55	61	.559	.547	.573	4.83	1.39	.0	5.0	4.8	5.2	5.2
August	29.66	29.92	29.36	70.0	79.0	77.7	83.4	66.6	75.0	93	59	66	66	66	86	65	70	.633	.637	.658	6.24	1.71	.0	5.9	5.6	5.3	5.4
September	29.68	30.15	29.22	57.2	69.1	66.5	73.2	54.4	63.8	91	42	52	50	53	83	53	64	.404	.392	.429	1.02	.53	.0	4.5	4.2	3.4	4.1
October	29.65	30.23	28.95	47.2	56.5	54.8	60.6	45.0	52.8	80	31	40	41	42	79	58	63	.267	.277	.290	6.76	2.05	T	6.4	6.0	5.9	6.5
November	29.68	30.24	29.07	38.8	47.2	45.4	50.7	36.5	43.6	70	25	29	29	31	68	50	58	.169	.170	.180	4.50	3.49	T	5.7	5.9	5.6	5.9
December	29.74	30.20	29.13	29.8	34.8	34.5	38.5	27.0	32.8	56	15	21	22	24	68	58	64	.119	.123	.132	1.52	.73	2.3	6.7	5.5	6.4	6.1
Year	29.64	30.41	28.95	48.3	56.4	55.4	61.0	45.0	53.0	96	15	40	40	41	74	56	61	.302	.302	.316	49.73	3.49	20.0	5.9	5.8	5.5	5.8

HARTFORD, CONN.

[$\phi=41^{\circ}46' N.$; $\lambda=72^{\circ}40' W.$]

January	30.09	30.68	29.39	33.0	37.7	-----	42.9	28.6	35.8	64	13	26	27	-----	75	66	-----	0.156	0.162	-----	5.81	1.02	4.2	6.8	6.8	-----	6.8
February	29.79	30.21	29.04	28.7	36.2	-----	40.5	25.4	33.0	59	10	20	22	-----	68	56	-----	.115	.127	-----	1.94	.92	.9	5.0	4.6	-----	5.0
March	29.73	30.23	29.14	29.8	37.1	-----	40.5	26.3	33.4	56	16	19	22	-----	62	55	-----	.108	.119	-----	3.78	2.40	5.0	4.8	5.5	-----	5.4
April	29.83	30.37	29.36	43.0	52.2	-----	55.9	38.3	47.1	71	29	32	33	-----	66	52	-----	.190	.194	-----	3.90	1.41	.9	5.7	6.6	-----	6.0
May	29.79	30.19	29.48	56.4	68.2	-----	72.6	50.3	61.4	92	39	47	47	-----	71	50	-----	.332	.337	-----	4.13	2.08	.0	5.4	5.2	-----	5.2
June	29.74	30.15	29.32	65.1	74.0	-----	78.1	59.4	68.8	95	52	56	57	-----	74	59	-----	.463	.482	-----	8.08	1.83	.0	5.9	5.2	-----	5.6
July	29.80	30.01	29.44	69.8	80.5	-----	83.8	63.9	73.8	97	54	62	60	-----	76	52	-----	.554	.533	-----	3.11	1.16	.0	4.4	3.6	-----	4.5
August	29.89	30.15	29.62	70.3	80.1	-----	83.9	65.3	74.6	96	56	65	65	-----	85	63	-----	.634	.635	-----	7.14	2.71	.0	5.6	4.5	-----	5.2
September	29.89	30.39	29.36	56.6	68.0	-----	72.0	52.0	62.0	94	41	51	52	-----	82	60	-----	.391	.416	-----	4.00	2.03	.0	3.7	3.7	-----	3.9
October	29.87	30.51	29.19	47.6	57.9	-----	60.5	42.6	51.6	76	26	41	40	-----	79	53	-----	.284	.278	-----	4.83	2.47	.0	5.0	5.6	-----	5.7
November	29.88	30.42	29.20	38.6	47.6	-----	51.2	34.5	42.8	63	21	30	30	-----	71	52	-----	.175	.174	-----	6.76	3.55	1.8	4.7	5.9	-----	5.3
December	29.92	30.38	29.02	28.3	33.8	-----	37.4	24.7	31.0	48	15	19	19	-----	67	53	-----	.107	.107	-----	2.33	.60	2.1	5.2	4.5	-----	4.9
Year	29.85	30.68	29.02	47.3	56.1	-----	59.9	42.6	51.3	97	10	39	40	-----	73	56	-----	.292	.297	-----	55.81	3.55	14.9	5.2	5.1	-----	5.3

HATTERAS, N. C.

[$\phi=35^{\circ}15' N.$; $\lambda=75^{\circ}40' W.$]

January	30.21	30.56	29.79	58.2	61.5	57.5	65.3	53.6	59.4	74	46	55	56	54	90	83	89	0.454	0.471	0.431	5.77	1.54	0.0	7.7	7.8	6.8	7.4
February	30.02	30.53	29.30	42.9	48.1	46.5	51.5	40.1	45.8	64	27	36	39	40	77	71	79	.232	.252	.265	5.33	1.32	T	5.7	5.7	5.5	5.7
March	29.97	30.47	29.56	47.7	53.2	50.8	55.8	44.2	50.0	72	31	41	43	44	79	70	78	.275	.296	.302	3.08	1.15	.0	5.1	4.3	3.0	4.4
April	29.99	30.41	29.45	58.2	62.8	59.6	65.3	53.9	59.6	75	42	52	52	53	79	69	79	.396	.404	.416	6.42	2.25	.0	5.1	4.3	4.8	4.4
May	30.00	30.30	29.74	67.6	71.6	66.9	73.1	62.2	67.6	86	51	59	61	60	76	69	78	.516	.547	.524	2.36	1.00	.0	3.2	3.8	4.1	3.6
June	29.94	30.27	29.58	76.8	80.3	75.6	81.9	71.5	76.7	81	62	69	70	69	77	70	81	.710	.730	.720	2.69	1.34	.0	5.0	4.4	5.1	4.5
July	29.99	30.16	29.52	78.4	82.0	78.3	83.2	74.2	78.7	87	69	73	73	73	84	75	84	.820	.815	.821	10.94	3.84	.0	6.2	6.0	6.2	6.0
August	30.09	30.28	29.89	79.2	82.3	78.9	84.0	75.0	79.5	89	70	78	73	74	81	73	84	.810	.809	.827	5.00	1.17	.0	5.4	5.0	5.3	5.0
September	30.03	30.37	29.71	72.8	76.7	72.0	77.5	68.9	73.2	86	62	66	66	65	79	70	80	.647	.643	.637	3.13	.82	.0	4.5	4.5	4.0	4.8
October	30.04	30.51	29.44	62.2	66.4	63.1	69.2	58.4	63.8	80	46	55	56	55	79	71	78	.464	.484	.472	8.26	3.03	.0	5.0	5.4	4.9	5.6
November	30.10	30.63	29.50	52.3	59.1	53.7	60.6	49.1	54.8	74	35	48	50	49	85	74	85	.351	.384	.369	5.07	2.15	.0	4.1	4.9	3.9	4.9
December	30.14	30.51	29.49	43.2	49.0	45.5	51.7	40.3	46.0	65	29	39	41	40	85	74	82	.250	.264	.260	3.55	1.01	.0	5.9	5.1	4.8	5.8
Year.....	30.04	30.63	29.49	61.6	66.1	62.4	68.3	57.6	62.9	89	27	56	57	56	81	72	81	.494	.508	.504	61.60	3.84	T	5.2	5.1	4.9	5.2

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

GREENSBORO, N. C.

[H=891 ft.; H_b=836 ft.; h_i=6 ft.; h_r=3 ft.; h_a=56 ft.]

Month	Wind														Number of days														
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from												Precipitation	Snow		Fog		Maximum temp.	32° or below	Elec- tricity				
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	9.7	NE	26	NE	0	9	24	1	1	6	17	1	3	0	1	4	26	23	16	0	0	0	24	13	0	0	4	0	0
February	9.0	SW	29	SW	0	8	11	3	2	5	16	5	5	1	9	2	17	11	8	6	2	0	14	6	1	0	17	1	0
March	9.3	NW	25	NW	0	7	10	2	1	6	14	9	13	0	19	3	9	8	6	1	1	0	5	1	0	0	16	1	0
April	9.6	SW	38	E	1	8	11	6	2	4	17	8	4	0	11	6	13	10	10	0	0	0	8	0	0	0	2	5	0
May	7.6	SW	28	SW	0	10	10	6	5	10	12	5	4	0	11	16	4	7	6	0	0	0	6	1	0	1	0	5	0
June	7.2	SW	31	NW	0	7	4	6	4	11	16	6	6	0	3	19	8	13	13	0	0	0	8	0	0	7	0	14	0
July	6.6	SW	34	SW	1	8	12	7	1	7	14	11	1	1	9	15	7	15	9	0	0	0	13	4	0	11	0	16	0
August	6.5	S	28	NW	0	4	13	4	5	17	12	5	2	0	7	14	10	16	13	0	0	0	21	7	0	9	0	16	0
September	6.8	NE	22	NE	0	6	27	4	1	8	10	3	0	1	10	10	10	6	6	0	0	0	18	2	0	1	0	2	0
October	9.2	NE	26	NW	0	6	17	4	1	4	16	7	6	1	11	6	14	12	10	0	0	0	13	1	0	0	4	1	0
November	7.7	N	28	NE	0	15	6	2	4	6	12	5	7	3	15	4	11	6	5	0	0	0	6	0	0	0	16	0	0
December	7.5	SW	24	SW	0	11	13	3	0	3	18	8	5	1	7	12	12	9	6	2	1	0	15	5	1	0	22	0	0
Year	8.0	SW	38	E	2	99	158	48	27	87	174	73	56	8	113	111	141	136	108	9	4	0	151	40	2	29	81	61	1

HARRISBURG, PA.

[H=337 ft.; H_b=374 ft.; h_i=94 ft.; h_r=42 ft.; h_a=104 ft.]

January	7.0	NE	28	SW	0	7	11	12	4	5	5	6	12	0	2	6	23	18	16	7	6	0	21	3	0	0	17	0	0
February	8.6	NW	26	SE	0	4	6	5	4	3	8	9	17	0	6	11	11	10	8	11	7	0	9	0	4	0	26	1	0
March	9.5	NW	28	NW	0	3	8	3	3	3	4	21	17	0	10	10	11	8	5	10	4	1	6	0	1	0	19	1	0
April	9.2	NW	28	SW	0	6	10	12	4	2	6	8	11	1	5	14	11	14	12	2	0	0	8	0	0	0	0	3	0
May	6.7	W	25	W	0	5	6	2	3	15	7	12	12	0	11	14	6	11	10	0	0	1	2	1	0	2	0	8	0
June	6.5	W	32	W	1	12	12	11	2	5	7	6	5	0	6	19	5	10	9	0	0	0	10	0	0	1	0	7	0
July	6.4	W	24	NW	0	6	7	4	9	8	6	18	4	0	8	18	5	11	9	0	0	0	7	0	0	7	0	9	0
August	5.6	S	21	SW	0	8	10	5	6	13	6	8	6	0	11	7	13	13	9	0	0	0	8	1	0	4	0	12	0
September	6.0	W	18	W	0	4	12	4	5	4	6	11	14	0	15	10	5	6	5	0	0	0	13	2	0	4	0	1	0
October	7.6	W	27	NE	0	4	11	6	8	3	9	14	10	0	5	12	14	12	11	1	0	0	13	0	0	0	2	0	0
November	7.9	W	22	NW	0	1	10	3	0	4	7	26	9	0	11	5	14	9	6	4	1	0	6	0	0	0	8	0	0
December	7.1	W	25	SW	0	2	11	3	2	6	6	16	16	0	9	9	13	10	6	10	5	0	9	0	8	0	21	0	0
Year	7.3	W	32	W	1	62	114	70	50	71	77	152	133	1	99	135	131	132	106	45	23	2	112	7	13	18	93	42	0

HARTFORD, CONN.

[H=62 ft.; H_b=159 ft.; h_i=66 ft.; h_r=58 ft.; h_a=100 ft.]

January	8.0	N	23	NW	0	9	0	1	0	8	2	3	8	0	8	6	17	14	14	7	4	0	15	0	3	0	21	0	0
February	9.5	NW	32	NW	1	10	1	0	1	2	4	1	9	0	13	6	9	7	5	8	2	0	10	0	3	0	24	0	0
March	10.0	NW	31	NW	0	6	1	0	0	4	4	3	13	0	12	6	13	10	7	13	4	0	3	0	2	0	28	0	0
April	9.3	N	26	NE	0	9	6	0	0	6	1	3	5	0	7	11	12	11	8	5	2	0	6	0	0	0	3	1	0
May	7.8	S	25	S	0	6	4	2	1	7	3	3	5	0	12	7	12	10	9	0	0	0	10	0	0	1	0	3	0
June	6.9	S	30	NW	1	11	3	0	2	5	2	0	7	0	10	7	13	17	14	0	0	1	11	0	0	1	0	10	0
July	6.8	S	25	SW	0	2	3	2	0	7	7	3	7	0	14	12	5	7	6	0	0	1	8	0	0	8	0	4	0
August	6.8	S	29	SW	0	10	4	0	0	10	3	2	2	0	11	11	9	11	10	0	0	0	9	0	0	6	0	7	0
September	6.9	S	24	NW	0	11	3	3	1	5	3	2	2	0	17	7	6	7	7	0	0	0	15	3	0	2	0	1	1
October	8.5	S	30	S	0	9	4	0	1	8	2	2	5	0	9	10	12	9	7	0	0	0	11	2	0	0	3	1	0
November	8.2	NW	30	NW	0	2	3	1	0	6	7	5	6	0	10	10	10	11	9	4	2	0	10	1	0	0	9	0	0
December	7.7	N	25	NW	0	10	3	0	1	4	3	3	7	0	12	10	9	8	8	7	3	0	9	0	7	0	28	0	0
Year	8.0	S	32	NW	1	95	35	9	7	72	41	30	76	0	135	103	127	122	104	44	17	2	117	6	15	18	116	27	1

HATTERAS, N. C.

[H=7 ft.; H_b=11 ft.; h_i=5 ft.; h_r=4 ft.; h_a=50 ft.]

January	15.6	SW	66	N	3	17	10	2	3	3	21	1	5	0	5	7	19	19	13	0	0	0	1	5	0	0	0	0	0
February	16.8	N	45	N	10	18	7	1	2	1	11	7	9	0	8	9	11	12	11	1	0	0	0	2	0	0	4	0	0
March	14.1	N	38	N	3	13	13	2	2	3	9	11	9	0	14	9	8	8	7	0	0	0	0	0	0	0	1	0	0
April	16.1	SW	42	SE	4	8	10	6	6	4	17	4	5	0	13	9	8	11	11	0	0	0	0	0	0	0	0	4	0
May	12.8	SW	30	N	0	12	17	5	3	3	20	1	1	0	18	7	6	8	8	0	0	0	0	0	0	0	0	6	0
June	11.9	SW	34	NW	2	6	7	4	3	8	23	6	3	0	11	14	5	6	6	0	0	0	0	0	0	0	0	6	0
July	11.3	SW	65	NW	3	1	4	3	3	10	33	5	3	0	6	13	12	19	15	0	0	0	0	0	0	0	0	12	0
August	9.5	SW	28	SW	0	2	8	9	6	16	18	1	2	0	10	14	7	16	11	0	0	0	0	0	0	0	0	5	0
September	12.1	NE	28	N	0	8	25	1	4	4	9	4	4	1	13	8	9	8	7	0	0	0	0	0	0	0	0	3	0
October	13.7	NE	34	S	3	8	16	4	5	5	6	11	7	0	13	3	15	15	14	0	0	0	0	0	0	0	0	4	0
November	13.4	N	37	NW	3	19	13	2	2	5	6	4	8	1	13	4	13	11	9	0	0	0	1	1	0	0	0	4	0
December	13.8	N	40	N	3	27	6	2	3	2	8	8	6	0	10	8	13	12	10	0	0	0	3	2	0	0	1	0	0
Year	13.4	SW	66	N	33	139	136	41	42	64	181	63	62	2	134	105	126	145	122	1	0	0	5	10	0	0	5	45	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

HAVRE, MONT.

[$\phi=48^{\circ}34'$ N.; $\lambda=109^{\circ}40'$ W.]

Month	Pressure			Temperature										Moisture													
	Extremes			Mean						Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°
January	27.37	27.86	26.66	-5.5	-0.6	-0.9	7.5	-13.0	-2.8	35	-36	-9	-3	-4	86	88	84	0.032	0.040	0.039	0.99	0.20	12.9	5.5	6.4	7.0	6.4
February	27.27	27.75	26.60	7.9	18.4	18.0	22.1	2.0	12.0	44	-29	4	11	11	82	74	72	.056	.080	.078	.24	.14	3.0	5.3	5.4	5.6	4.8
March	27.42	27.73	27.03	24.1	35.8	36.9	40.2	21.3	30.8	56	4	20	24	24	84	64	60	.110	.131	.128	.34	.12	1.5	5.0	5.5	5.7	5.2
April	27.22	27.63	26.77	37.2	54.6	56.3	59.4	35.0	47.2	78	25	26	25	23	66	34	30	.140	.131	.122	.31	.20	3.1	4.4	5.0	5.7	5.1
May	27.32	27.76	26.81	45.1	66.1	67.6	71.7	43.6	57.6	86	33	32	33	29	61	31	27	.181	.188	.166	.51	.18	.0	4.5	5.3	4.9	4.7
June	27.33	27.59	26.92	53.2	73.4	75.7	78.0	51.4	64.7	101	39	42	38	36	67	30	26	.280	.241	.224	3.73	2.22	.0	4.4	4.8	4.7	4.6
July	27.34	27.64	27.00	59.9	80.4	82.9	86.7	58.6	72.6	105	52	50	43	46	70	36	33	.359	.348	.327	2.19	1.31	.0	3.4	4.2	5.1	4.1
August	27.31	27.69	26.87	53.7	76.3	81.2	83.8	51.2	67.5	98	37	40	41	37	62	32	24	.248	.260	.232	.82	.42	.0	3.6	3.7	2.8	3.1
September	27.40	27.77	27.10	47.2	66.8	69.3	72.2	44.6	58.4	88	30	41	42	40	79	46	40	.259	.277	.255	1.07	.44	T	3.6	4.6	4.2	4.0
October	27.37	27.82	26.87	41.2	56.7	55.3	60.9	37.4	49.2	82	25	34	36	36	76	48	51	.194	.211	.213	.50	.43	.0	4.7	6.6	6.2	5.8
November	27.39	27.84	26.76	25.9	36.0	32.9	38.8	20.8	29.8	65	2	20	22	21	78	60	65	.107	.122	.115	.28	.12	3.6	6.9	7.6	7.7	7.4
December	27.36	28.00	26.56	15.0	24.0	22.8	29.9	9.3	19.6	49	-18	9	13	13	78	61	66	.075	.086	.086	.14	.07	2.1	5.5	7.6	7.5	7.3
Year	27.34	28.00	26.56	33.7	49.0	49.8	54.3	30.2	42.2	105	-36	26	28	26	74	50	48	.170	.176	.165	11.12	2.22	26.2	4.7	5.6	5.6	5.2

HELENA, MONT.

[$\phi=46^{\circ}34'$ N.; $\lambda=112^{\circ}04'$ W.]

January	25.75	26.08	25.26	-4.7	0.1	0.4	6.2	-10.9	-2.4	33	-30	-9	-4	-5	79	82	77	0.029	0.039	0.033	0.84	0.33	15.0	5.9	6.4	7.9	7.0
February	25.67	25.98	25.16	18.9	24.1	26.5	31.9	13.7	22.8	46	-10	11	12	13	70	59	56	.074	.078	.082	.18	.06	4.2	6.8	8.0	8.2	8.1
March	25.80	26.16	25.41	26.4	35.3	37.8	40.6	23.9	32.2	55	8	20	23	24	75	60	58	.106	.121	.126	.98	.46	12.2	6.7	7.0	8.2	7.5
April	25.70	26.04	25.08	36.2	48.4	50.4	54.3	32.8	43.6	75	22	25	26	26	63	42	41	.131	.140	.147	.57	.28	1.8	5.6	8.4	7.5	7.7
May	25.79	26.12	25.38	44.7	61.2	64.1	67.1	42.3	54.7	81	34	34	39	38	67	46	41	.197	.247	.236	.29	.10	.0	5.7	6.1	5.4	6.0
June	25.84	26.07	25.43	49.7	64.8	67.2	70.6	46.8	58.7	97	35	40	40	40	71	44	42	.252	.253	.256	2.27	.56	.0	5.6	7.6	7.2	7.2
July	25.85	26.10	25.55	59.5	78.8	80.3	84.4	57.2	70.8	97	50	44	44	44	58	31	32	.294	.292	.300	1.38	.86	.0	3.7	4.4	5.2	4.7
August	25.83	26.12	25.49	56.4	73.7	78.6	80.2	53.5	66.8	92	39	37	40	37	50	31	24	.225	.247	.226	.65	.14	.0	2.9	3.4	3.3	3.4
September	25.88	26.22	25.59	49.9	65.5	68.1	70.7	46.6	58.6	86	31	38	39	37	66	41	36	.232	.245	.225	2.25	1.50	.3	4.3	4.9	5.8	5.1
October	25.86	26.18	25.47	43.9	54.1	55.5	60.0	40.1	50.0	76	34	34	36	36	71	53	51	.201	.217	.218	.38	.24	T	4.9	5.6	5.4	5.9
November	25.82	26.18	25.35	32.5	38.2	37.7	42.7	27.7	35.2	62	10	23	24	24	69	58	58	.125	.132	.128	.31	.08	5.2	7.9	7.7	7.5	7.9
December	25.81	26.30	25.21	26.2	30.6	29.6	35.7	20.6	28.2	51	-10	16	19	19	65	61	64	.097	.108	.108	1.50	.72	14.0	6.2	8.5	7.7	8.6
Year	25.80	26.30	25.08	36.6	47.9	49.7	53.7	32.9	43.3	97	-30	26	28	28	67	51	48	.164	.177	.174	11.60	1.50	52.7	5.5	6.5	6.6	6.6

HONOLULU, T. H.

[$\phi=21^{\circ}19'$ N.; $\lambda=157^{\circ}52'$ W.]

January	29.90	30.04	29.66	70.0	73.4	70.4	75.8	66.3	71.0	79	62	62	62	61	76	70	74	0.561	0.578	0.541	6.96	1.88	0.0	5.4	6.0	4.8	5.4
February	29.96	30.13	29.72	69.8	72.8	70.3	74.5	66.3	70.4	81	58	62	62	62	77	69	75	.561	.559	.560	5.77	3.58	.0	7.1	6.7	6.5	6.6
March	29.95	30.14	29.73	70.9	72.9	70.7	74.7	67.1	70.9	80	63	61	61	62	72	68	74	.550	.549	.556	1.69	3.86	.0	6.6	6.7	6.5	6.4
April	30.01	30.14	29.85	73.3	76.1	72.9	77.7	69.7	73.7	81	68	62	63	62	69	64	71	.567	.574	.567	2.30	1.81	.0	5.5	5.7	4.9	5.6
May	30.02	30.12	29.83	74.5	76.5	74.0	78.5	70.2	74.4	82	67	64	64	64	70	67	71	.598	.606	.595	1.54	1.64	.0	4.3	6.0	4.6	5.1
June	30.01	30.09	29.91	76.0	78.8	75.8	80.5	72.7	76.6	84	68	66	66	65	70	65	70	.628	.633	.625	1.44	1.16	.0	4.9	4.8	5.3	4.5
July	29.98	30.06	29.87	77.3	79.5	76.4	81.5	73.4	77.4	84	70	66	66	66	68	64	71	.638	.642	.651	1.51	.42	.0	3.9	4.2	4.4	4.2
August	29.97	30.06	29.83	77.5	80.0	77.0	81.7	73.5	77.6	84	71	68	68	68	72	68	73	.675	.694	.677	.98	.22	.0	5.6	5.5	5.5	5.7
September	29.98	30.07	29.87	78.0	80.8	76.8	82.7	72.9	77.8	85	71	67	66	67	69	61	72	.658	.641	.656	1.67	1.12	.0	3.4	5.6	3.4	4.1
October	29.96	30.08	29.78	77.3	80.7	76.6	82.2	73.0	77.6	84	70	68	67	68	73	64	75	.677	.671	.681	1.45	.65	.0	5.1	5.3	4.8	4.9
November	29.99	30.10	29.83	75.5	78.5	75.0	80.0	71.2	75.6	82	66	65	65	65	71	64	72	.622	.621	.621	1.14	.36	.0	3.1	4.9	4.4	4.4
December	29.92	30.15	29.66	72.6	77.0	72.6	78.6	68.9	73.8	92	65	65	64	63	77	64	77	.615	.593	.615	5.45	3.97	.0	4.1	4.9	3.8	4.8
Year	29.97	30.15	29.66	74.4	77.2	74.0	79.0	70.4	74.7	85	58	65	64	65	72	66	73	.612	.613	.612	30.90	3.58	.0	4.9	5.5	4.9	5.1

HOUSTON, TEX.

[$\phi=29^{\circ}47'$ N.; $\lambda=95^{\circ}24'$ W.]

January	29.89	30.23	29.54	51.7	57.6	52.0	61.0	45.9	53.4	76	30	50	50	50	93	80	80	0.392	0.413	0.392	3.25	0.38	0.0	8.8	8.6	8.9	8.9
February	29.93	30.40	29.45	52.0	60.1	60.1	64.3	48.3	56.3	70	34	44	44	44	74	58	58	.322	.327	.327	.45	.19	.0	6.4	6.5	6.3	6.3
March	29.91	30.27	29.53	53.2	60.6	60.6	65.4	50.1	57.8	78	36	48	46	46	82	62	62	.356	.337	.337	3.89	1.61	.0	7.7	6.4	6.7	6.7
April	29.80	30.13	29.43	60.9	74.2	74.2	77.7	59.1	68.4	87	45	56	55	55	85	53	53	.479	.464	.464	.33	.19	.0	6.0	5.3	5.6	5.6
May	29.83	30.01	29.61	69.2	82.9	82.9	86.0	67.6	76.8	91	57	65	59	59	87	46	46	.627	.517	.517	T	T	.0	3.0	3.8	3.5	3.5
June	29.81	30.03	29.48	76.2	86.5	86.5	91.4	73.7	82.6	99	64	72	69	69	99	58	58	.797	.715	.715	3.12	2.08	.0	3.0	5.6	4.9	4.9
July	29.86	30.01	29.75	77.0	87.7	87.7	92.7	75.4	84.0	97	70	73	69	69	98	55	55	.813	.715	.715	2.94	1.12	.0	3.5	4.8	4.7	4.7
August	29.83	30.05	29.63	77.0	88.3	88.3	92.6	75.5	84.0	100	72	74	70	70	90	56	56	.828	.742	.742	4.18	1.71	.0	3.2	5.3	5.2	5.2
September	29.85	30.09	29.69	72.3	84.2	84.2	87.8	70.5	79.2	96	57	66	64	64	83	52	52	.673	.622	.622	4.69	1.71	.0	4.3	4.8	4.7	4.7
October	29.86	30.14	29.50	63.7	76.3	76.3	80.9	62.2	71.6	94	42	57	57	57	81	54	54	.508	.507	.507	6.82	5.90	.0	3.2	2.8	3.1	3.1
November	29.97	30.40	29.56	53.2	63.2	63.2	67.5	49.3	58.4	83	28	47	48	48	83	57	57	.367	.371	.371	1.37	.79	.0	5.8	4.7	5.2	5.2
December	29.98	30.30	29.50	51.3	58.4	58.4	61.6	48.0	54.8	75	27	46	48	48	84	70	70	.354	.378	.378	7.14	3.10	.0	7.2	7.7	7.6	7.6
Year	29.88	30.40	29.43	63.1	73.3	73.3	77.4	60.5	68.9	100	27	58	57	57	85	58	58	.543	.509	.509	38.18	5.90	.0	5.2	5.5	5.5	5.5

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

HAVRE, MONT.

[H=2,488 ft.; H_b=2,507 ft.; h_i=11 ft.; h_r=3 ft.; h_a=67 ft.]

Month	Wind													Number of days																			
	By self-register					Number of times, 7.30 a. m., and 7.30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow	Hail	Fog		Maximum temp.	32° or below	32° or above	Minimum temperature or below	Thunderstorm	Electricity					
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest				Calm	0.01 inch or over			0.04 inch or over	T or more							0.01 inch or more melted	Light	Dense	32° or below	90° or above
January	10.4	W.	39	SW.	3	1	4	17	0	0	16	19	3	2	9	6	16	16	12	22	16	0	3	0	30	0	31	0	1				
February	10.3	SW.	40	W.	3	2	4	10	0	1	15	16	8	0	9	12	7	5	2	11	5	0	0	0	20	0	28	0	0				
March	10.0	E.	29	SE.	0	1	6	27	3	0	8	11	6	0	12	9	10	8	3	11	6	0	2	0	7	0	29	0	0				
April	11.3	SW.	38	W.	2	2	2	15	6	1	13	15	5	1	8	16	6	6	2	3	2	0	0	0	0	0	11	0	2				
May	10.4	W.	37	N.	4	4	6	10	6	4	4	16	12	0	12	11	8	7	4	0	0	2	0	0	0	0	0	3	4				
June	9.7	SW.	32	NW.	2	4	8	3	8	7	3	13	8	9	1	11	14	5	7	6	0	0	1	0	0	0	5	0	5				
July	7.9	E.	43	SW.	4	6	9	12	2	1	7	11	9	5	13	13	5	8	6	0	0	0	0	0	0	11	0	5	0				
August	8.1	W.	31	SW.	0	1	7	8	2	2	8	13	20	1	17	11	3	4	3	0	0	0	1	0	0	9	0	2	3				
September	7.5	E.	23	NW.	0	5	6	19	0	1	4	12	10	3	16	6	8	7	6	1	0	0	2	0	0	0	2	4	0				
October	9.1	W.	30	SW.	0	2	5	13	3	0	9	21	8	1	7	13	11	4	2	0	0	0	0	0	0	0	5	0	0				
November	9.3	W.	34	SW.	1	0	2	12	2	0	14	19	11	0	7	3	20	6	3	12	6	4	0	12	0	28	0	2	0				
December	9.8	SW.	35	W.	2	0	3	13	1	0	17	16	12	0	5	8	18	6	1	11	6	0	3	0	15	0	30	0	1	0			
Year	9.5	E.	43	SW.	19	32	57	164	32	13	128	177	113	14	126	122	117	84	50	71	41	3	15	0	84	25	164	20	17	0			

HELENA, MONT.

[H=4,090 ft.; H_b=4,124 ft.; h_i=85 ft.; h_r=78 ft.; h_a=111 ft.]

January	6.0	NW.	34	SW.	1	9	2	1	1	2	17	9	19	2	8	3	20	12	7	26	12	0	2	0	0	30	0	31	0	0
February	8.8	SW.	34	SW.	1	3	2	1	0	7	9	16	18	0	1	8	19	10	1	19	10	0	0	0	12	0	27	0	0	
March	7.4	SW.	26	SW.	0	10	3	1	0	4	20	14	10	0	4	8	19	9	5	18	9	0	2	1	5	0	27	0	1	
April	10.8	SW.	30	W.	0	0	1	2	1	8	26	17	4	1	2	10	18	7	5	8	3	0	1	0	0	0	15	0	1	
May	9.7	SW.	36	W.	2	8	2	5	1	3	20	19	4	0	9	9	13	4	4	0	0	1	0	0	0	0	4	0	0	
June	8.4	SW.	32	SW.	1	6	4	1	0	4	24	9	11	1	4	7	19	13	11	0	0	5	0	0	0	3	0	7	2	
July	8.4	SW.	32	S.	1	3	0	8	1	6	26	8	10	0	9	15	7	13	7	0	0	1	0	0	0	7	0	13	2	
August	8.7	SW.	32	SW.	1	3	3	3	0	2	26	14	11	0	14	16	1	3	2	0	0	0	0	0	0	3	0	4	4	
September	7.4	SW.	30	SE.	0	10	5	5	0	3	20	6	11	0	10	11	9	11	7	2	2	0	2	0	0	0	1	9	1	
October	7.6	SW.	26	W.	0	3	1	1	0	1	29	17	10	0	10	11	5	3	2	0	0	0	0	0	0	0	1	5	0	
November	7.5	SW.	30	W.	0	1	4	1	0	7	28	11	7	1	3	8	19	10	3	13	4	0	0	0	3	0	23	0	1	
December	9.1	SW.	32	S.	1	4	2	2	0	5	26	12	11	0	3	2	26	12	7	16	8	0	2	2	7	0	26	0	3	
Year	8.3	SW.	36	W.	8	60	29	31	4	52	271	152	126	5	77	107	181	109	62	104	48	7	9	3	57	13	150	38	20	

HONOLULU, T. H.

[H=12 ft.; H_b=38 ft.; h_i=86 ft.; h_r=68 ft.; h_a=100 ft.]

January	9.1	E.	35	SW.	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	8	14	9	18	14	0	0	0	0	0	0	0	0	4	0	0
February	10.0	E.	30	E.	0	7	10	19	3	4	2	4	3	4	4	13	11	14	9	0	0	0	0	0	0	0	0	0	0	0
March	10.9	E.	30	NE.	0	1	12	36	6	2	4	1	0	0	7	9	15	11	8	0	0	0	0	0	0	0	0	0	0	0
April	9.8	E.	22	NE.	0	5	6	44	2	3	0	0	0	0	7	14	9	12	6	0	0	0	0	0	0	0	0	0	0	0
May	9.6	E.	26	E.	0	0	17	35	3	4	2	0	1	0	9	15	7	18	11	0	0	0	0	0	0	0	0	1	0	0
June	10.1	E.	25	E.	0	0	18	40	2	0	0	0	0	0	9	18	3	15	4	0	0	0	0	0	0	0	0	0	0	0
July	10.7	E.	28	E.	0	0	11	47	2	1	0	1	0	0	12	17	2	20	12	0	0	0	0	0	0	0	0	1	0	0
August	10.5	E.	31	E.	0	2	20	37	1	1	0	1	0	0	4	20	7	15	7	0	0	0	0	0	0	0	0	0	0	0
September	8.7	E.	22	NE.	0	1	14	42	1	0	1	1	0	0	10	19	1	13	6	0	0	0	0	0	0	0	0	0	0	0
October	8.0	E.	23	E.	0	2	23	27	2	2	2	1	3	0	11	15	5	14	8	0	0	0	0	0	0	0	0	1	0	0
November	9.8	E.	34	E.	1	5	15	36	0	1	3	0	0	0	10	18	2	15	8	0	0	0	0	0	0	0	0	0	0	0
December	8.4	E.	35	NE.	2	5	25	19	0	3	1	7	2	0	11	14	6	15	9	0	0	0	0	0	0	0	0	3	0	0
Year	9.6	E.	35	NE.	4	29	185	423	27	21	16	16	9	4	102	186	77	180	102	0	0	0	0	0	0	0	0	10	0	0

HOUSTON, TEX.

[H=52 ft.; H_b=138 ft.; h_i=292 ft.; h_r=286 ft.; h_a=314 ft.]

January	12.8	N.	32	SE.	1	11	4	5	5	4	0	0	2	0	0	6	25	26	22	0	0	0	23	2	0	0	3	2	0	0
February	13.4	S.	35	NW.	2	9	4	3	2	8	1	1	0	0	7	7	14	8	4	0	0	9	1	0	0	0	0	1	0	0
March	12.9	SE.	30	SE.	0	8	6	3	6	5	1	1	1	0	6	11	14	13	9	0	0	17	2	0	0	0	6	0	0	0
April	13.2	SE.	28	NW.	0	2	0	4	7	12	1	0	4	0	9	11	10	6	2	0	0	14	2	0	0	0	0	0	0	0
May	12.0	SE.	25	SE.	0	2	3	0	9	10	4	2	1	0	17	11	3	0	0	0	0	9	0	0	0	3	0	0	0	0
June	10.3	S.	27	S.	0	0	3	1	2	17	0	6	1	0	7	20	3	9	5	0	0	2	0	0	0	20	0	10	0	0
July	10.1	S.	38	NE.	2	0	0	5	1	14	9	1	1	0	14	11	6	9	8	0	0	1	0	0	0	27	0	10	0	0
August	8.7	S.	30	SE.	0	2	3	4	3	11	5	3	0	0	6	21	4	10	9	0	0	3	0	0	0	24	0	13	0	0
September	9.5	S.	22	NW.	0	3	5	6	1	6	4	4	1	0	13	8	9	7	6	0	0	4	0	0	0	19	0	6	0	0
October	11.1	SE.	35	NW.	1	7	6	2	3	8	4	0	1	0	20	6	5	7	7	0	0	16	2	0	0	3	0	4	0	0
November	12.7	SE.	35	NE.	1	6	5	6	5	3	1	0	3	1	10	11	9	5	4	0	0	7	3	0	0	2	2	0	0	0
December	11.8	SE.	29	NW.	0	4	5	7	7	4	1	0	3	0	7	1	23	14	9	0	0	20	2	0	0	0	0	0	0	0
Year	11.5	S.	38	NE.	7	54	44	46	51	102	31	18	18	1	116	124	125	114	85	0	0	0	125	14	0	87	7	54	0	0

1 Observations taken at 8:00

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

HURON, S. DAK.

[$\phi=44^{\circ}21' N.$; $\lambda=98^{\circ}14' W.$]

Month	Pressure			Temperature								Moisture															
	Extremes		Mean						Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation			Cloudiness							
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°
January.....	28.68	29.13	27.79	-3.0	3.6	1.3	9.2	-9.3	0.0	36	-22	-5	0	-1	91	83	87	0.036	0.041	0.038	1.51	0.63	19.9	4.3	4.9	4.4	4.6
February.....	28.58	29.21	27.98	7.5	18.5	19.4	23.7	4.7	14.2	41	-17	5	1	14	89	73	79	.058	.077	.088	.55	.45	7.7	3.4	5.3	3.8	4.6
March.....	28.72	29.11	28.07	25.2	34.3	35.3	39.2	22.9	31.0	68	8	21	22	24	83	60	63	.115	.126	.133	1.45	1.15	5.4	5.6	5.7	4.9	5.6
April.....	28.49	28.93	28.07	36.8	48.3	49.7	52.4	34.9	43.6	74	11	33	33	33	86	60	58	.191	.191	.192	2.43	.72	12.0	6.7	6.4	6.2	6.5
May.....	28.54	28.92	28.14	52.2	68.5	67.6	72.0	49.2	60.6	90	37	46	44	45	79	44	48	.317	.306	.325	1.48	.39	.0	4.7	5.0	5.6	5.3
June.....	28.53	28.81	27.79	58.0	69.6	73.8	76.4	55.3	65.8	106	39	52	51	55	81	50	52	.400	.392	.424	3.69	2.30	.0	5.5	4.7	4.4	4.8
July.....	28.54	28.88	28.31	66.1	85.6	86.7	90.8	63.8	77.3	109	52	57	57	57	75	42	39	.480	.483	.457	.98	.37	.0	2.6	2.9	2.2	2.9
August.....	28.54	28.82	28.30	68.3	87.8	87.4	92.5	66.5	79.5	109	53	61	58	57	79	41	41	.547	.510	.486	.94	.50	.0	3.1	2.5	3.9	3.0
September.....	28.62	29.04	28.22	53.2	72.5	71.8	76.7	51.2	64.0	99	32	46	46	46	78	41	43	.330	.330	.332	.80	.58	.0	2.6	3.1	2.8	3.1
October.....	28.63	29.19	28.15	39.5	55.2	54.1	59.8	36.4	48.1	86	13	31	33	33	74	46	47	.187	.202	.203	.35	.16	T	4.1	4.1	3.9	3.8
November.....	28.67	29.16	27.87	24.2	37.7	34.4	41.0	20.9	31.0	71	-8	18	20	20	75	52	60	.106	.112	.113	.43	.21	4.0	4.0	4.9	4.1	4.9
December.....	28.70	29.15	28.20	13.3	21.2	20.2	27.6	7.1	17.4	51	-10	8	12	14	79	65	74	.071	.082	.086	1.01	.46	17.1	4.6	5.4	4.6	5.4
Year.....	28.60	29.21	27.79	36.8	50.2	50.1	55.1	33.6	44.4	109	-22	31	31	33	81	55	58	.236	.238	.240	15.62	2.30	66.1	4.3	4.6	4.2	4.5

INDIANAPOLIS, IND.

[$\phi=39^{\circ}46' N.$; $\lambda=86^{\circ}10' W.$]

January.....	29.25	29.63	28.66	30.7	34.8	35.3	41.1	25.3	33.2	60	4	26	27	30	84	73	79	0.155	0.162	0.184	8.05	2.68	4.0	7.8	7.8	8.3	8.3
February.....	29.12	29.73	28.43	28.0	33.4	33.2	38.2	22.6	30.4	68	8	22	23	23	78	63	64	.134	.134	.131	1.68	.70	2.3	5.8	7.0	7.1	7.1
March.....	29.18	29.52	28.55	31.5	39.5	40.6	45.1	28.8	37.0	67	17	26	27	27	78	60	59	.144	.152	.154	1.47	.44	4.7	5.3	7.0	6.1	6.7
April.....	29.04	29.53	28.47	45.2	54.5	54.2	59.6	41.8	50.7	83	30	37	38	39	74	57	61	.232	.244	.255	4.27	1.00	T	6.9	7.3	7.6	7.6
May.....	29.12	29.37	28.87	57.2	68.4	67.3	72.3	53.6	63.0	92	39	48	48	48	74	50	54	.356	.352	.354	1.58	.41	.0	5.6	5.7	6.5	5.8
June.....	29.08	29.43	28.85	66.0	76.2	75.3	80.5	62.4	71.4	89	50	58	58	58	77	56	58	.496	.503	.508	3.69	.96	.0	6.1	6.6	7.1	6.6
July.....	29.13	29.35	28.87	69.2	81.4	80.5	85.2	65.5	75.4	93	51	60	58	60	74	48	51	.540	.506	.531	5.37	2.01	.0	3.9	5.0	4.6	4.6
August.....	29.18	29.41	28.96	69.8	83.3	81.5	86.8	67.3	77.0	94	60	64	62	64	83	50	57	.602	.562	.603	3.46	1.51	.0	3.5	3.6	4.2	4.2
September.....	29.21	29.51	28.82	57.5	71.3	69.0	75.3	55.6	65.4	91	40	50	48	50	76	46	52	.385	.375	.388	3.28	2.45	.0	3.9	3.7	4.4	4.3
October.....	29.16	29.62	28.48	48.0	57.3	55.1	60.9	45.1	53.0	86	29	41	40	40	78	54	60	.286	.271	.274	5.59	2.58	T	6.0	6.0	6.2	6.5
November.....	29.22	29.82	28.62	34.5	42.7	41.5	47.4	31.5	39.4	75	13	27	26	28	74	54	60	.156	.155	.167	1.94	.67	2.6	6.0	6.7	5.9	6.5
December.....	29.25	29.69	28.74	26.9	31.4	31.8	35.1	23.9	29.5	54	8	22	24	25	82	72	75	.128	.140	.144	3.77	2.28	5.7	7.5	7.6	7.2	7.8
Year.....	29.16	29.82	28.43	47.0	56.2	55.4	60.6	43.6	52.1	94	4	40	40	41	78	57	61	.301	.296	.308	44.15	2.68	19.3	5.7	6.2	6.3	6.3

ITHACA, N. Y.

[$\phi=42^{\circ}27' N.$; $\lambda=76^{\circ}29' W.$]

January.....	29.29	29.91	28.61	30.9	35.6	33.5	39.9	24.6	32.2	63	10	26	27	26	80	70	74	0.148	0.154	0.148	3.66	0.72	7.4	8.2	8.1	6.4	8.2
February.....	29.05	29.57	28.45	25.4	31.9	29.7	36.2	20.1	28.2	57	3	20	20	19	78	61	65	.111	.109	.107	2.22	1.60	10.1	8.0	7.1	6.2	7.2
March.....	29.02	29.53	28.56	25.9	32.7	29.4	36.0	21.3	28.6	52	8	18	20	21	72	60	70	.101	.110	.114	1.71	.44	13.4	7.1	7.6	6.4	7.2
April.....	29.07	29.54	28.58	41.1	48.6	45.6	52.7	35.0	43.8	72	27	33	31	32	74	54	62	.192	.179	.187	3.75	.70	3.0	7.5	7.6	7.3	7.5
May.....	29.07	29.47	28.74	54.7	66.3	61.3	70.5	46.5	58.5	91	35	45	45	46	71	50	61	.309	.306	.324	3.50	1.10	.0	6.0	6.5	5.7	6.1
June.....	29.03	29.35	28.68	64.6	72.9	68.5	77.9	55.1	66.5	91	47	56	55	57	75	58	68	.459	.447	.466	6.07	1.58	.0	6.5	7.7	6.2	7.2
July.....	29.08	29.26	28.77	68.4	80.4	75.1	84.2	59.5	71.8	96	49	60	59	59	75	50	59	.528	.507	.508	1.61	.61	.0	4.7	5.9	5.2	5.5
August.....	29.17	29.40	28.82	68.4	81.2	74.6	84.6	62.4	73.5	94	50	63	64	65	83	57	72	.578	.595	.615	8.14	5.43	.0	5.9	6.5	6.3	6.4
September.....	29.17	29.65	28.64	54.1	68.2	60.4	71.1	48.5	59.8	92	34	43	50	50	80	53	70	.357	.381	.388	1.86	.88	.0	4.9	6.0	4.3	5.5
October.....	29.11	29.70	28.44	45.4	53.1	48.8	56.8	40.3	48.6	82	25	39	39	39	78	60	71	.253	.254	.261	5.17	2.00	.6	7.7	8.3	6.1	8.2
November.....	29.12	29.68	28.55	37.2	44.4	40.8	47.1	33.2	40.2	66	23	28	29	29	70	57	65	.162	.170	.169	2.14	1.14	3.0	8.0	7.8	5.9	7.5
December.....	29.16	29.65	28.50	26.4	31.2	29.3	34.5	22.9	28.7	47	9	20	21	21	77	66	70	.114	.116	.117	1.58	.47	8.0	7.7	7.7	7.8	7.8
Year.....	29.11	29.91	28.44	45.2	53.9	49.8	57.6	39.1	48.4	96	3	38	38	39	76	58	67	.276	.277	.284	41.41	5.43	45.5	6.8	7.2	6.2	7.0

JACKSONVILLE, FLA.

[$\phi=30^{\circ}20' N.$; $\lambda=81^{\circ}39' W.$]

January	30.13	30.36	29.90	62.3	71.1	65.5	74.5	60.5	67.5	83	44	60	61	61	94	72	87	0.533	0.548	0.551	4.52	2.43	0.0	7.0	6.8	5.9	6.7
February	30.03	30.40	29.64	52.4	61.1	59.5	66.7	49.1	57.9	80	36	46	44	46	80	57	63	.341	.318	.333	4.05	2.09	.0	6.3	5.3	5.5	5.8
March	29.99	30.43	29.67	53.1	66.3	61.9	70.5	51.1	60.8	86	35	48	44	47	82	48	62	.352	.320	.344	2.49	.94	.0	5.1	5.7	4.6	5.3
April	29.97	30.38	29.66	62.2	74.0	68.5	77.8	58.8	68.3	88	46	56	53	55	81	49	65	.475	.429	.457	4.01	1.14	.0	4.4	4.9	4.3	4.5
May	29.96	30.15	29.77	70.9	80.8	75.6	83.9	67.0	75.4	93	61	64	59	63	80	50	67	.603	.516	.590	1.24	.51	.0	3.4	4.2	4.5	4.4
June	29.95	30.14	29.61	77.0	86.4	81.4	90.2	72.8	81.5	95	68	71	68	70	82	55	69	.763	.687	.729	4.73	1.88	.0	3.6	5.9	6.7	5.5
July	30.00	30.19	29.81	77.4	85.9	79.9	89.5	73.7	81.6	96	69	73	71	72	87	62	77	.813	.749	.780	9.69	2.62	.0	4.9	6.6	7.3	6.4
August	30.00	30.17	29.75	77.2	85.7	80.2	89.1	73.7	81.4	95	69	74	71	73	89	63	79	.832	.763	.813	10.78	2.75	.0	4.4	6.3	6.4	5.7
September	29.96	30.18	29.63	73.4	82.6	77.6	85.0	71.2	78.1	94	64	70	68	70	88	62	77	.726	.684	.723	7.87	3.27	.0	6.0	6.9	6.6	6.4
October	29.97	30.21	29.62	63.3	74.3	69.7	73.7	61.7	69.5	92	39	59	58	59	86	60	72	.553	.533	.551	2.61	.68	.0	5.6	5.7	4.5	5.0
November	30.03	30.48	29.48	53.7	64.9	60.1	68.6	51.2	59.9	79	26	50	50	52	88	62	77	.386	.398	.424	2.57	.96	.0	4.7	4.9	3.5	5.7
December	30.12	30.36	29.74	46.5	60.2	54.0	63.8	44.6	54.2	79	21	43	44	45	88	57	74	.302	.324	.327	.64	.27	.0	3.9	3.8	3.8	4.0
Year	30.01	30.48	29.48	64.1	74.4	69.5	78.1	61.3	69.7	96	21	60	58	59	85	58	72	.557	.522	.552	55.20	3.27	.0	4.9	5.6	5.2	5.4

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

HURON, S. DAK

[H=1,282 ft.; H_b=1,307 ft.; h_t=59 ft.; h_r=53 ft.; h_a=74 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temp.		32° or below	Minimum temperature 32° or below	Thunderstorm	Electricity	
																	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below					90° or above
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm															
January	Mi. 10.3	NW.	Mi. 28	W.	0	7	2	4	14	5	2	11	16	1	14	9	8	10	7	21	10	0	4	0	30	0	31	0	1
February	10.8	NW.	38	W.	1	4	2	0	16	2	3	9	20	0	13	9	6	5	3	14	5	0	6	0	20	0	28	0	1
March	10.2	NE.	41	NE.	2	6	13	5	13	0	5	8	12	0	9	12	10	5	2	14	4	0	1	0	8	0	28	1	0
April	11.7	NW.	46	NW.	3	8	3	11	12	1	3	7	15	0	6	10	14	12	10	8	5	0	4	1	3	0	12	2	0
May	10.9	SE.	37	W.	2	7	8	2	23	2	4	5	11	0	9	15	7	10	8	0	0	1	0	0	1	0	6	3	0
June	9.1	SE.	37	W.	1	4	5	6	25	1	5	6	8	0	13	8	9	10	7	0	0	0	4	1	0	1	0	4	0
July	8.7	SE.	26	SW.	0	12	2	5	27	3	2	4	6	1	20	10	1	5	5	0	0	1	2	0	0	17	0	6	0
August	10.2	SE.	42	W.	1	8	3	3	26	10	3	4	5	0	22	6	3	5	4	0	0	0	4	0	0	21	0	8	0
September	9.6	SE.	28	SW.	0	9	7	2	16	13	1	6	6	0	18	8	4	2	2	0	0	0	9	0	0	5	1	3	1
October	9.7	SE.	31	NW.	0	9	2	3	16	3	3	13	13	0	16	7	8	6	2	2	1	0	2	0	0	0	9	1	5
November	9.8	NW.	30	NW.	0	7	1	0	18	4	2	11	17	0	14	6	10	6	3	11	5	0	0	0	12	0	24	0	0
December	9.4	SE.	38	NW.	1	7	3	7	16	9	0	9	11	0	11	8	12	11	7	15	10	0	10	1	20	0	30	0	0
Year	10.0	SE.	46	NW.	11	88	51	48	222	53	33	93	140	2	165	108	92	89	60	85	40	2	46	3	93	45	163	31	11

INDIANAPOLIS, IND.

[H=715 ft.; H_b=822 ft.; h_t=194 ft.; h_r=188 ft.; h_a=230 ft.]

January	11.8	S.	33	W.	1	5	10	10	7	11	5	8	6	0	4	4	23	16	15	8	2	0	8	2	8	0	27	0	0
February	13.4	W.	37	W.	3	4	1	4	6	10	8	14	9	0	3	13	12	10	8	16	4	0	5	1	10	0	24	2	0
March	11.3	NW.	36	W.	1	12	6	7	2	6	5	10	14	0	6	9	16	11	7	11	6	0	2	1	5	0	19	3	0
April	12.5	W.	31	W.	0	5	4	6	9	8	9	10	0	0	3	7	20	14	12	1	0	0	4	0	0	2	4	0	0
May	10.0	S.	36	W.	3	8	6	5	10	12	7	7	7	0	9	10	12	14	9	0	0	0	2	0	0	2	0	8	0
June	9.7	N.	32	W.	1	12	9	3	6	10	7	7	5	1	1	18	11	10	9	0	0	0	0	0	0	0	7	0	0
July	8.4	SW.	44	W.	1	6	4	7	3	12	16	12	2	0	11	16	4	9	8	0	0	0	1	0	0	9	0	10	0
August	8.1	E.	53	W.	1	7	3	22	8	9	8	4	1	0	15	10	6	8	8	0	0	0	4	0	0	8	0	8	1
September	9.6	S.	29	S.	0	8	17	4	8	18	1	2	2	0	14	11	5	6	3	0	0	0	2	0	0	2	0	3	0
October	10.5	NW.	34	S.	2	6	6	7	5	10	8	5	15	0	5	13	13	12	8	2	0	0	2	0	0	0	3	0	1
November	11.1	W.	30	W.	0	1	2	3	4	15	7	13	15	0	9	7	14	12	11	9	5	0	3	0	7	0	14	1	0
December	10.3	W.	29	W.	0	2	2	8	8	9	12	12	8	1	5	5	21	16	12	10	7	0	11	1	11	0	25	0	0
Year	10.5	S.	53	W.	13	76	70	86	76	131	92	103	94	2	85	123	157	138	110	57	24	0	44	5	41	21	114	46	2

ITHACA, N. Y.

[H=872 ft.; H_b=836 ft.; h_t=77 ft.; h_r=76 ft.; h_a=100 ft.]

January	11.1	SE.	34	SE.	3	6	3	2	17	12	6	1	15	0	3	5	23	15	14	13	7	0	4	1	7	0	28	0	0
February	10.9	NW.	40	SE.	2	5	3	3	13	9	4	2	17	0	6	4	18	13	6	16	10	0	2	0	13	0	25	2	0
March	10.4	NW.	28	SE.	0	6	4	4	5	2	6	6	29	0	7	3	21	14	9	22	11	0	2	1	7	0	29	1	0
April	11.3	NW.	44	SE.	5	4	4	4	20	4	2	2	20	0	4	8	18	17	12	7	5	0	11	2	0	0	8	0	0
May	7.6	NW.	25	S.	0	7	3	8	7	5	3	0	28	1	9	8	14	16	13	0	0	0	9	6	0	1	0	2	0
June	6.5	NW.	25	SE.	0	7	8	1	8	7	4	0	24	1	3	12	15	16	11	0	0	1	9	3	0	1	0	7	0
July	6.9	NW.	22	S.	0	7	4	8	11	10	5	2	15	0	10	11	10	11	9	0	0	0	3	0	0	0	8	0	0
August	6.1	SE.	25	S.	0	6	5	5	14	12	5	1	12	2	6	11	14	11	8	0	0	0	8	1	0	9	0	11	0
September	7.9	NW.	27	S.	0	5	4	10	13	7	5	0	15	1	9	8	13	14	9	0	0	0	1	0	0	2	0	3	0
October	10.3	NW.	31	NW.	2	2	2	0	11	12	13	3	17	0	5	4	21	14	10	6	3	0	4	1	2	0	14	2	0
November	9.6	NW.	33	SE.	2	2	2	0	11	12	13	3	17	0	5	4	21	14	10	6	3	0	4	1	2	0	14	2	0
December	9.2	NW.	29	SE.	0	6	2	2	11	13	7	6	15	0	3	6	22	12	8	18	9	0	6	1	10	0	28	0	0
Year	9.0	NW.	44	SE.	12	63	44	48	147	104	69	24	226	5	67	87	211	170	123	86	46	1	67	18	39	21	138	38	0

JACKSONVILLE, FLA.

[H=18 ft.; H_b=43 ft.; h_t=86 ft.; h_r=78 ft.; h_a=110 ft.]

January	7.8	S.	22	NE.	0	10	14	3	21	9	3	0	1	1	5	13	13	10	8	0	0	0	9	2	0	0	0	1	0
February	8.9	NW.	27	W.	0	9	9	2	4	7	6	7	10	2	9	8	11	9	8	0	0	0	1	0	0	0	0	2	0
March	7.6	NW.	30	NW.	0	10	6	9	9	3	4	7	13	1	8	14	9	7	7	0	0	0	4	0	0	0	0	3	0
April	8.6	SW.	25	W.	0	0	4	10	6	9	15	7	9	0	13	7	10	9	7	0	0	0	0	0	0	0	0	9	0
May	7.3	E.	27	NE.	0	2	7	19	13	4	10	4	2	1	14	12	5	7	5	0	0	1	0	0	0	3	0	6	0
June	7.5	S.	28	SW.	0	0	4	7	9	17	17	5	1	0	4	22	4	10	8	0	0	0	0	0	0	17	0	16	0
July	7.2	SW.	23	SW.	0	2	2	7	11	11	17	8	2	2	5	12	14	17	15	0	0	0	0	0	0	14	0	19	0
August	6.4	S.	25	E.	0	5	12	9	13	13	3	1	3	3	7	16	8	18	15	0	0	0	0	0	0	12	0	18	0
September	7.4	NE.	24	N.	0	10	10	12	4	7	3	7	5	2	6	12	12	14	11	0	0	0	0	0	0	3	0	10	0
October	8.2	E.	25	NW.	0	7	10	13	7	3	5	8	9	0	11	6	14	12	8	0	0	0	5	2	0	2	0	0	0
November	8.2	N.	24	NW.	0	21	11	10	2	2	3	3	7	1	11	10	9	10	9	0	0	0	3	0	0	0	2	2	0
December	7.6	NE.	21	W.	0	14	17	4	2	3	4	3	15	0	14	9	8	8	4	0	0	0	4	1	0	0	4	0	0
Year	7.7	S.	30	NW.	0	90	106	105	101	88	90	60	77	13	107	141	117	131	105	0	0	1	26	5	0	51	6	86	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

KALISPELL, MONT.

[$\phi=48^{\circ}10' N.$; $\lambda=114^{\circ}25' W.$]

Month	Pressure			Temperature										Moisture													
	Extremes			Mean						Extremes		Dew point			Relative humidity		Vapor pressure			Precipitation			Cloudiness				
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>				
January	26.96	27.31	26.44	-1.1	4.7	5.1	8.9	-6.8	1.0	28	-27	-2	3	3	94	92	92	0.039	0.048	0.048	2.12	0.81	34.2	7.8	8.1	7.2	7.8
February	26.82	27.22	26.25	18.4	25.7	27.4	30.6	13.1	21.8	42	-9	15	20	21	87	78	75	.091	.109	.111	1.03	.39	14.5	7.1	9.0	7.3	7.6
March	26.94	27.32	26.53	27.6	38.3	40.3	42.6	24.9	33.8	50	14	23	27	27	82	64	59	.123	.147	.146	.44	.17	2.4	5.3	6.5	6.5	5.9
April	26.86	27.22	26.24	35.2	47.7	48.9	51.7	33.0	42.4	76	25	30	32	29	82	56	50	.168	.181	.163	1.22	.30	T	6.9	8.8	8.5	8.2
May	26.92	27.26	26.61	43.1	60.7	64.6	66.0	40.5	53.2	80	30	34	33	30	70	37	28	.195	.190	.168	1.00	.31	.0	5.8	5.6	5.0	5.1
June	26.96	27.22	26.57	49.1	65.4	67.4	70.4	47.4	58.9	92	35	43	43	41	80	48	42	.285	.291	.270	2.25	.57	.0	6.6	7.0	7.0	6.9
July	26.95	27.15	26.68	55.0	76.2	79.8	82.2	53.8	68.0	93	49	46	47	44	72	38	32	.312	.327	.301	.83	.42	.0	3.9	4.5	3.6	3.9
August	26.95	27.24	26.60	50.4	70.4	74.3	75.9	48.0	62.0	87	36	41	41	39	72	37	31	.265	.267	.247	.66	.39	.0	4.6	4.6	4.4	4.6
September	26.97	27.38	26.72	47.1	66.0	69.4	71.5	44.7	58.1	86	32	39	42	40	76	45	40	.243	.271	.256	.91	.37	.0	4.0	4.8	4.7	4.7
October	27.00	27.35	26.57	40.1	53.4	56.7	58.7	38.0	47.4	70	31	37	40	41	88	62	65	.221	.252	.262	.87	.51	.0	4.5	7.4	6.8	7.1
November	26.95	27.33	26.46	32.1	38.1	38.3	41.5	29.2	35.4	60	12	28	30	30	84	73	74	.154	.170	.172	1.24	.35	5.4	7.5	8.8	8.1	8.4
December	26.96	27.48	26.22	25.8	48.0	49.9	52.5	32.5	42.4	93	-4	22	24	24	86	78	81	.122	.132	.136	1.23	.24	11.6	6.0	7.0	6.5	6.6
Year	26.94	27.48	26.22	35.2	48.0	49.9	52.5	32.3	42.4	93	-27	30	32	31	81	59	56	.185	.199	.190	13.80	.81	68.1	6.0	7.0	6.5	6.6

KANSAS CITY, MO.¹[$\phi=39^{\circ}05' N.$; $\lambda=94^{\circ}37' W.$]

January	29.31	29.79	28.70	20.3	24.8	23.6	31.8	14.1	23.0	56	1	16	17	16	81	70	72	0.099	0.102	0.097	3.37	1.94	3.6	5.9	6.4	5.9	6.3
February	29.23	29.90	28.30	26.5	33.1	33.6	39.5	22.8	31.2	61	9	19	22	23	73	61	65	.108	.120	.132	.86	.75	3.9	4.8	5.8	5.4	6.0
March	29.28	29.63	28.41	33.4	43.2	43.4	48.0	31.5	39.8	70	21	28	29	32	78	57	63	.153	.164	.187	1.73	1.20	4.2	5.8	7.1	7.1	7.0
April	29.06	29.55	28.52	47.7	58.5	59.8	63.5	44.5	54.0	82	29	41	41	42	78	55	55	.267	.278	.284	2.51	1.12	T	6.5	6.7	6.9	7.1
May	29.14	29.41	28.86	59.5	72.6	73.4	76.9	57.5	67.2	90	44	54	56	55	83	56	55	.431	.456	.455	3.63	1.36	.0	5.7	5.9	5.2	5.9
June	29.13	29.46	28.76	68.5	80.8	80.8	84.9	66.6	75.8	100	52	62	63	62	81	56	57	.577	.588	.585	3.73	1.67	.0	6.0	5.8	4.6	5.7
July	29.15	29.34	28.82	72.4	88.0	88.1	92.5	70.3	81.4	103	61	65	63	64	78	45	46	.621	.588	.606	3.11	.99	.0	4.5	4.3	3.8	4.5
August	29.17	29.36	28.94	74.8	89.6	89.1	94.2	73.4	83.8	104	66	67	66	66	78	47	48	.671	.635	.641	2.26	1.44	.0	4.8	5.4	3.3	4.4
September	29.23	29.57	28.93	61.6	78.4	78.2	83.9	60.2	72.0	100	39	53	52	51	75	42	40	.438	.419	.406	.21	.09	.0	4.5	3.9	3.9	4.0
October	29.22	29.79	28.71	48.4	63.3	61.7	68.5	45.6	57.0	90	24	40	40	41	74	45	49	.267	.272	.278	1.15	.55	T	4.3	4.7	4.2	4.7
November	29.32	29.86	28.74	34.6	44.3	43.1	49.1	30.5	39.8	83	5	26	28	28	72	55	58	.150	.171	.166	1.33	.64	3.4	3.8	5.2	5.1	5.4
December	29.34	29.67	28.94	28.6	33.1	32.9	38.0	24.4	31.2	59	4	24	25	25	82	72	72	.142	.144	.147	.95	.81	.5	5.5	6.8	5.5	6.9
Year	29.22	29.90	28.30	48.0	59.1	59.0	64.2	45.1	54.7	104	1	41	42	42	78	55	57	.327	.328	.332	24.84	1.94	15.6	5.2	5.7	5.1	5.7

KEOKUK, IOWA

[$\phi=40^{\circ}22' N.$; $\lambda=91^{\circ}26' W.$]

January	29.48	29.93	28.83	19.3	23.9	24.1	30.1	13.7	21.9	46	-1	13	14	15	73	65	67	0.087	0.095	0.095	3.36	1.64	3.3	5.6	6.8	6.5	6.5
February	29.36	30.04	28.49	22.8	28.6	29.6	36.8	18.8	27.8	60	1	15	16	18	71	56	62	.095	.098	.111	1.51	1.21	3.6	4.5	5.8	5.1	5.5
March	29.45	29.78	28.71	31.2	41.3	40.5	45.8	28.8	37.3	69	18	25	25	27	76	51	58	.139	.142	.158	.81	.41	.8	5.4	6.4	6.9	6.5
April	29.22	29.75	28.73	45.4	54.4	54.6	59.5	42.7	51.1	82	31	38	39	41	78	59	62	.243	.253	.268	3.89	2.31	T	7.9	7.6	6.7	7.5
May	29.32	29.65	29.08	58.1	69.8	69.7	74.1	55.1	64.6	90	43	51	50	53	77	51	57	.385	.378	.426	2.85	1.24	.0	5.7	6.5	5.6	6.1
June	29.29	29.67	28.96	66.6	77.8	77.8	81.7	63.0	72.4	99	51	60	59	61	79	55	58	.524	.519	.557	2.14	.85	.0	6.3	5.8	5.4	6.1
July	29.32	29.50	29.03	71.0	83.8	83.6	88.0	67.8	77.9	96	58	63	61	62	75	48	51	.575	.553	.575	5.34	2.03	.0	5.1	5.6	4.8	5.2
August	29.35	29.52	29.14	71.7	84.7	83.0	88.2	69.4	78.8	98	64	65	66	67	80	54	61	.625	.635	.671	3.88	2.24	.0	5.3	4.9	3.7	4.9
September	29.40	29.71	29.04	59.1	74.0	72.6	78.4	56.3	67.4	94	40	50	50	50	74	45	46	.399	.398	.392	1.47	.75	.0	3.8	4.5	3.2	4.1
October	29.38	29.93	28.83	46.4	59.3	57.2	63.3	44.6	54.0	89	27	38	38	38	74	48	51	.255	.257	.255	1.08	.77	T	4.8	5.5	4.6	5.3
November	29.46	30.05	28.87	32.6	42.8	40.1	47.2	28.3	37.8	80	4	24	24	26	70	48	56	.141	.145	.157	1.92	.99	5.5	4.4	4.7	4.2	4.3
December	29.48	29.87	29.06	25.5	30.1	29.9	34.2	21.9	28.0	56	2	20	21	22	79	68	72	.126	.124	.128	1.90	.84	.9	6.1	7.5	7.0	7.6
Year	29.38	30.05	28.49	45.8	55.9	55.2	60.6	42.5	51.6	99	-1	38	39	40	76	54	58	.300	.300	.316	30.15	2.31	14.1	5.4	6.0	5.3	5.8

KEY WEST, FLA.

[$\phi=24^{\circ}33' N.$; $\lambda=81^{\circ}48' W.$]

January	30.06	30.22	29.95	73.9	80.1	75.6	81.1	72.8	77.0	84	70	68	69	69	83	70	79	0.692	0.712	0.698	0.84	0.36	0.0	3.8	2.8	2.5	3.7
February	30.01	30.16	29.87	69.8	76.1	71.2	78.2	67.0	72.6	84	58	64	64	63	83	68	77	.609	.616	.590	3.32	1.05	.0	4.7	4.5	3.8	4.6
March	29.96	30.27	29.75	69.5	76.1	71.8	78.6	67.2	72.9	88	58	64	66	65	84	70	79	.618	.642	.628	1.18	.54	.0	4.9	4.5	4.2	4.5
April	29.98	30.26	29.78	74.5	80.2	75.7	82.3	71.4	76.8	88	62	67	67	66	77	65	73	.663	.683	.660	.13	.10	.0	4.7	4.0	4.4	4.7
May	29.93	30.04	29.85	77.5	81.8	78.0	84.2	73.4	78.8	88	70	69	69	69	76	66	74	.714	.709	.702	9.63	4.53	.0	3.5	4.1	3.8	3.8
June	29.97	30.12	29.78	81.5	84.7	81.3	87.0	76.9	82.0	91	71	74	75	74	79	72	79	.844	.859	.839	6.04	2.85	.0	5.9	5.3	5.3	6.0
July	30.02	30.12	29.91	81.8	86.1	82.2	88.2	77.6	82.9	91	70	75	76	74	80	71	77	.844	.883	.896	4.11	2.44	.0	5.4	5.2	6.3	5.7
August	29.96	30.10	29.80	82.3	87.1	83.1	89.6	78.1	83.8	93	71	75	76	75	79	76	76	.865	.898	.859	4.34	1.28	.0	4.4	5.2	4.7	5.1
September	29.90	30.04	29.75	80.2	85.2	80.7	87.7	76.8	82.2	92	71	74	75	74	83	71	79	.848	.860	.830	8.01	2.49	.0	4.9	5.0	4.5	4.9
October	29.92	30.03	29.74	77.0	81.9	77.7	84.1	73.4	78.8	90	62	70	71	70	80	78	77	.755	.773	.752	4.59	1.31	.0	3.9	3.9	3.9	4.1
November	29.96	30.22	29.58	70.4	75.3	71.8	77.2	68.4	72.8	83	56	65	64	64	82	70	77	.619	.619	.610	1.28	.50	.0	4.2	4.5	3.7	4.2
December	30.06	30.20	29.75	65.3	71.3	67.6	73.4	63.9	68.6	83	48	61	62	61	86	73	81	.553	.570	.558	.82	.44	.0	4.8	4.9	4.3	4.7
Year	29.98	30.27	29.58	75.3	80.5	76.4	82.6	72.2	77.4	93	48	69	70	69	81	70	77	.720	.735	.714	44.29	4.53	.0	4.6	4.5	4.4	4.7

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

KALISPELL, MONT.

[H=2,956 ft.; H_b=2,973 ft.; h_i=48 ft.; h_r=40 ft.; h_a=56 ft.]

Month	Wind													Number of days																	
	By self-register					Number of times, 7:30 a. m. and 7:30 p. m., winds observed from																									
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	Precip- itation	Snow	Fog	Maxi- mum temp.	32° temperature or below	Elec- tricity								
January	5.8	W.	26	NE.	0	11	3	0	2	5	3	29	8	1	4	5	22	21	15	24	21	0	0	0	31	0	31	0	0		
February	5.4	W.	28	SW.	0	7	3	3	6	5	9	11	11	1	2	10	16	14	7	19	14	0	4	0	16	0	28	0	0		
March	5.4	NW.	17	NE.	0	9	2	7	6	11	2	13	12	0	9	10	12	5	4	7	3	0	0	0	2	0	29	0	3		
April	7.1	SE.	27	SW.	0	2	0	4	12	5	12	13	12	0	1	27	11	6	9	2	0	0	0	0	0	16	1	2	0		
May	7.4	W.	24	S.	0	1	6	6	8	3	11	12	14	1	10	8	13	10	6	0	0	1	0	0	0	1	2	0	0		
June	6.3	W.	38	SW.	1	4	3	6	9	4	8	16	10	0	3	10	17	13	11	0	0	2	0	0	0	1	0	6	2	0	
July	6.2	W.	23	NW.	0	4	0	7	9	2	3	24	13	0	14	11	6	6	5	0	0	0	1	0	0	2	0	5	3	0	
August	6.1	W.	21	SW.	0	5	1	5	8	2	3	25	12	1	12	14	5	7	4	0	0	0	0	0	0	0	0	3	3	0	
September	5.4	W.	18	SE.	0	2	2	6	10	3	0	21	16	0	15	2	13	9	4	0	0	1	4	0	0	1	3	6	0	0	
October	4.6	W.	21	SW.	0	2	1	9	2	10	1	15	19	3	6	6	19	10	4	0	0	1	4	2	0	0	2	0	6	0	
November	5.1	W.	19	SW.	0	5	3	5	4	7	4	16	14	2	1	5	24	14	10	7	4	0	11	1	6	0	21	0	2	0	
December	4.9	W.	26	SW.	0	5	1	5	4	5	6	21	12	3	0	4	27	19	11	18	13	0	12	5	13	0	27	0	0	0	
Year	5.8	W.	38	SW.	1	57	25	63	80	62	62	216	153	12	77	87	201	139	87	84	57	5	36	8	68	3	156	20	29	0	0

KANSAS CITY, MO.¹[H=741 ft.; H_b=750 ft.; h_i=32 ft.; h_r=3 ft.; h_a=45 ft.]

January	10.3	N.	39	W.	1	13	11	6	6	3	9	4	10	0	9	6	16	9	7	9	3	0	13	1	15	0	30	1	0	0
February	12.2	SW.	39	NW.	5	6	3	2	6	4	15	8	17	0	8	7	13	6	3	9	4	0	2	0	7	0	22	0	0	0
March	10.1	SW.	36	SW.	2	11	11	7	4	6	10	2	10	1	3	13	15	9	6	10	5	0	8	1	4	0	17	1	0	0
April	12.4	NW.	41	W.	4	9	3	5	7	5	9	6	15	1	5	9	16	9	5	3	0	1	9	1	0	0	3	5	0	0
May	8.6	SW.	30	SE.	0	10	7	8	8	9	10	5	4	1	8	10	13	12	8	0	0	0	9	2	0	1	0	8	0	0
June	8.7	SW.	26	NW.	0	12	10	8	7	6	13	3	0	1	6	14	10	9	8	0	0	0	4	1	0	10	0	8	0	0
July	8.0	SW.	45	NW.	1	2	15	9	8	12	14	1	1	0	11	16	4	10	9	0	0	0	5	0	0	23	0	10	0	0
August	8.0	S.	33	NW.	1	7	8	12	11	11	8	2	1	2	13	14	4	5	5	0	0	0	5	0	0	24	0	4	0	0
September	8.6	NE.	27	SW.	0	9	11	13	5	10	7	3	1	1	14	10	6	3	3	0	0	0	4	1	0	7	0	2	0	0
October	8.5	SW.	34	NW.	1	8	8	10	3	5	17	6	2	3	14	8	9	8	6	1	0	0	7	0	0	1	3	1	0	0
November	9.9	SW.	36	W.	2	7	8	4	3	8	13	4	12	1	9	12	9	5	4	7	3	0	8	1	5	0	15	0	0	0
December	9.7	SW.	30	NW.	0	5	4	5	4	1	18	8	14	3	9	1	21	7	4	6	1	0	17	5	8	0	28	1	0	0
Year	9.5	SW.	45	NW.	17	99	99	89	72	80	143	47	87	14	109	120	136	92	68	45	16	1	91	13	39	66	118	41	0	0

KEOKUK, IOWA

[H=574 ft.; H_b=614 ft.; h_i=64 ft.; h_r=56 ft.; h_a=78 ft.]

January	8.1	NW.	30	SW.	0	8	5	6	12	3	7	7	14	0	10	1	20	10	8	8	3	0	8	3	18	0	31	1	0	0	0
February	9.8	NW.	34	NW.	1	7	0	1	10	4	6	11	17	0	12	3	13	7	5	7	4	0	2	2	12	0	24	1	0	0	0
March	8.3	SW.	23	N.	0	10	10	7	1	3	13	1	14	3	7	8	16	9	4	11	4	0	1	0	5	0	21	0	0	0	0
April	9.6	SE.	35	SW.	1	10	5	5	12	3	10	4	10	1	5	7	18	14	13	1	0	2	1	0	0	1	4	0	0	0	0
May	7.6	S.	22	S.	0	5	8	8	7	11	9	6	7	1	10	8	13	9	6	0	0	0	1	1	0	1	0	11	0	0	0
June	6.9	SW.	26	N.	0	13	11	6	2	4	14	5	5	0	7	11	12	9	6	0	0	0	0	0	0	5	0	13	1	0	0
July	5.5	SW.	31	NE.	0	3	5	10	4	14	17	4	2	3	8	16	7	13	10	0	0	1	0	0	0	14	0	15	0	0	0
August	5.8	SE.	26	SE.	0	5	6	13	16	5	11	0	2	4	13	8	10	6	4	0	0	1	0	0	0	11	0	7	0	0	0
September	6.9	SE.	20	SW.	0	8	6	10	12	7	9	0	4	4	16	6	8	3	3	0	0	0	2	0	0	3	0	2	0	0	0
October	7.5	SW.	24	W.	0	7	5	8	6	4	10	6	13	3	13	6	12	5	3	1	0	1	5	3	0	0	3	2	1	0	0
November	8.7	SW.	30	NW.	0	4	2	1	3	6	17	8	17	2	16	5	9	7	6	6	3	1	3	1	8	0	18	2	0	0	0
December	8.4	SW.	22	NW.	0	6	2	6	6	3	16	12	9	2	4	6	21	13	7	9	3	0	13	7	12	0	27	0	0	0	0
Year	7.7	SW.	35	SW.	2	86	65	81	91	67	139	64	114	23	121	85	159	105	75	43	17	6	36	17	55	34	125	58	2	0	0

KEY WEST, FLA.

[H=50 ft.; H_b=21 ft.; h_i=10 ft.; h_r=3 ft.; h_a=64 ft.]

January	11.6	E.	20	E.	0	1	5	41	13	2	0	0	0	15	14	2	12	4	0	0	0	0	0	0	0	0	0	0	0	0	0
February	10.8	SE.	29	W.	0	11	12	8	12	5	3	2	3	0	13	10	5	11	9	0	0	0	0	0	0	0	0	0	4	0	0
March	9.7	NE.	36	W.	1	18	19	10	3	3	2	4	2	1	14	10	7	8	5	0	0	0	0	0	0	0	0	3	0	0	0
April	10.2	SE.	25	W.	0	7	11	16	16	6	1	1	2	0	12	11	7	3	1	0	0	0	0	0	0	0	0	2	0	0	0
May	8.9	E.	43	NW.	1	9	8	31	2	2	0	3	5	2	15	11	5	8	7	0	0	0	0	0	0	0	0	5	0	0	0
June	8.9	SE.	30	W.	0	4	3	23	12	8	5	5	0	0	7	10	13	13	9	0	0	0	0	0	0	0	1	0	10	0	0
July	8.4	E.	26	S.	0	1	3	29	16	8	1	2	2	0	7	12	12	10	9	0	0	0	0	0	0	0	3	0	12	0	0
August	8.2	E.	24	W.	0	3	5	33	11	2	5	1	2	0	12	12	7	15	11	0	0	0	0	0	0	0	11	0	18	0	0
September	8.8	E.	34	W.	1	4	11	22	6	7	1	4	2	3	11	11	8	13	11	0	0	0	0	0	0	0	7	0	10	0	0
October	9.1	E.	27	SW.	0	4	14	20	9	8	1	1	5	0	13	16	2	15	13	0	0	0	0	0	0	0	0	2	0	0	0
November	11.4	N.	30	NW.	0	28	14	5	2	3	2	3	3	0	15	8	7	8	5	0	0	0	0	0	0	0	0	2	0	0	0
December	10.5	NE.	34	NW.	1	23	21	7	7	2	0	1	1	0	11	12	8	8	5	0	0	0	1	0	0	0	0	0	0	0	0
Year	9.7	E.	43	NW.	4	113	126	245	109	56	21	27	27	6	145	137	83	124	89	0	0	0	1	0	0	22	0	68	0	0	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

KNOXVILLE, TENN.

[$\phi=35^{\circ}58' N.$; $\lambda=83^{\circ}55' W.$]

Month	Pressure			Temperature										Moisture													
	Monthly mean	Extremes		Mean						Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation		Cloudiness							
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>°</i>	<i>°</i>
January	29.09	29.36	28.70	48.1	53.9	52.8	58.9	44.0	51.4	76	27	44	46	46	86	76	80	0.305	0.332	0.330	11.63	2.40	0.0	8.0	8.1	7.6	8.3
February	29.00	29.45	28.44	35.3	43.3	42.6	49.5	31.2	40.4	75	19	29	30	30	77	60	62	170	181	177	4.51	1.89	6.6	5.1	6.5	5.3	6.3
March	28.98	29.37	28.54	39.5	52.0	51.9	57.8	36.9	47.4	76	26	33	32	32	78	48	48	199	191	190	1.61	1.58	9.5	1.1	4.3	4.2	4.7
April	28.91	29.40	28.58	50.6	63.1	63.7	69.1	47.8	58.4	88	33	42	42	44	74	50	51	280	289	305	3.04	1.93	0.0	4.8	5.1	4.6	5.0
May	28.96	29.17	28.71	60.9	74.7	72.6	79.3	56.6	68.0	93	46	54	52	53	78	47	54	427	412	423	4.38	1.73	0.0	4.5	4.5	4.8	4.8
June	28.92	29.15	28.63	70.6	83.6	80.6	87.3	67.1	77.2	92	61	64	63	62	81	51	55	607	577	571	2.52	2.75	0.0	5.3	5.2	4.1	5.1
July	28.93	29.19	28.81	71.0	84.0	81.7	88.4	67.5	78.0	96	55	66	64	65	83	53	59	635	615	637	6.33	2.92	0.0	3.7	4.4	4.7	4.8
August	29.01	29.24	28.85	71.9	84.2	81.1	88.8	69.6	79.2	95	64	68	69	70	90	62	69	698	712	722	5.70	1.75	0.0	4.5	4.2	4.5	4.4
September	29.02	29.34	28.72	61.8	77.6	72.7	81.4	60.7	71.0	91	48	59	58	61	90	52	68	512	503	559	2.11	1.98	0.0	3.4	2.9	4.1	3.6
October	29.00	29.37	28.61	50.0	62.7	59.7	66.4	47.6	57.0	86	29	45	46	47	84	58	66	326	346	358	4.08	1.12	T	5.1	5.5	5.4	5.7
November	29.03	29.60	28.59	38.5	51.1	48.0	54.6	35.7	45.2	76	18	33	36	36	81	58	66	203	234	234	1.06	2.22	T	4.9	4.9	5.3	5.2
December	29.11	29.43	28.55	35.1	42.9	42.0	47.3	31.8	39.6	65	9	32	34	34	87	70	73	193	209	215	3.29	1.16	1.3	6.6	7.0	5.9	6.8
Year	29.01	29.60	28.44	52.8	64.4	62.4	69.1	49.7	59.4	96	9	47	48	48	82	57	63	380	383	393	50.26	2.92	8.8	5.1	5.2	5.0	5.4

LA CROSSE, WIS.

[$\phi=43^{\circ}49' N.$; $\lambda=91^{\circ}15' W.$]

January	29.32	29.84	28.55	7.0	16.0	13.5	21.6	-1.7	10.0	40	-23	4	9	7	84	72	74	0.058	0.069	0.066	2.48	0.74	23.1	5.5	5.3	4.0	5.3
February	29.18	29.89	28.43	12.0	20.7	20.4	26.7	6.7	16.7	45	-20	8	12	14	83	66	74	0.073	0.081	0.088	1.69	1.31	12.2	4.2	5.6	5.3	5.6
March	29.34	29.69	28.90	23.1	34.2	33.1	38.4	20.8	29.6	55	4	19	24	24	83	64	69	104	132	138	1.87	1.60	6.8	4.1	4.3	5.4	4.8
April	29.11	29.58	28.50	40.5	50.6	49.8	54.7	37.8	46.2	76	26	36	39	39	83	68	69	212	241	241	3.15	1.05	2	7.4	7.2	7.0	7.2
May	29.19	29.46	28.84	53.8	67.0	66.4	70.6	50.9	60.8	89	36	48	48	47	82	52	52	355	358	352	2.98	1.85	0	5.6	4.8	5.5	5.0
June	29.17	29.55	28.75	60.5	74.6	72.9	77.3	57.5	67.4	95	39	57	55	56	89	52	56	482	460	465	3.81	2.11	0	5.5	6.4	5.1	5.8
July	29.18	29.38	28.85	67.1	84.2	81.5	87.3	64.1	75.7	96	52	62	61	62	83	46	52	560	550	564	1.63	1.35	0	3.1	3.5	4.0	3.4
August	29.23	29.57	28.98	68.3	83.1	81.8	86.6	66.9	76.8	100	55	64	65	65	86	56	57	599	620	619	3.97	1.38	0	3.8	4.5	1.9	3.5
September	29.28	29.59	28.84	55.3	71.4	66.9	74.6	52.7	63.6	98	35	51	51	51	85	50	57	396	404	401	1.91	1.84	0	3.5	4.4	4.4	4.1
October	29.25	29.81	28.57	41.6	53.1	49.8	56.4	39.1	47.8	81	24	38	38	39	87	58	67	247	256	256	3.51	1.21	T	5.6	6.0	4.9	5.5
November	29.27	29.91	28.52	28.7	37.1	34.7	41.1	24.6	32.8	62	5	23	23	24	79	57	65	136	135	142	2.35	1.63	7.4	5.4	6.4	5.2	6.0
December	29.33	29.80	28.80	19.1	24.1	22.2	27.3	14.1	20.7	41	0	16	15	16	85	68	76	094	094	097	1.64	1.18	4.7	7.2	7.9	6.3	7.9
Year	29.24	29.91	28.43	39.8	51.3	49.4	55.2	36.1	45.7	100	-23	36	37	37	84	59	64	276	283	286	28.99	2.11	54.4	5.1	5.5	4.9	5.3

LANDER, WYO.

[$\phi=42^{\circ}50' N.$; $\lambda=108^{\circ}45' W.$]

January	24.46	24.80	24.08	5.3	7.3	7.0	13.9	-12.0	1.0	36	-31	-7	1	-2	90	74	72	0.029	0.043	0.037	0.39	0.19	5.1	2.2	5.4	4.0	3.8
February	24.50	24.80	23.81	16.4	30.4	32.2	37.4	9.8	23.6	53	-13	10	13	13	78	50	46	070	079	081	1.33	1.19	3.0	3.5	4.1	5.1	4.2
March	24.61	25.00	24.09	23.5	37.2	40.4	42.6	20.2	31.4	59	-2	18	22	20	80	57	48	102	119	109	1.43	1.42	13.5	5.1	5.5	6.2	5.6
April	24.54	24.87	23.97	32.4	47.3	49.6	53.7	29.2	41.4	72	21	24	24	23	71	43	40	129	131	124	2.58	1.01	16.7	5.0	6.4	6.3	6.0
May	24.63	24.99	24.27	43.8	63.9	65.2	69.5	41.1	55.3	84	30	32	33	28	65	34	30	183	189	159	2.23	1.98	0	4.6	5.9	6.6	5.7
June	24.67	24.90	24.32	49.8	68.1	69.8	73.3	46.1	59.7	95	32	40	41	40	73	40	39	256	266	255	3.68	1.80	8.5	4.8	6.4	7.4	6.1
July	24.74	24.97	24.56	57.1	77.8	77.3	83.7	55.0	69.4	96	46	48	52	48	72	44	42	336	396	351	2.79	1.92	0	4.6	5.2	7.0	5.4
August	24.72	24.98	24.50	56.5	80.8	82.3	86.9	53.1	70.0	95	43	40	41	38	56	26	23	252	260	240	1.12	1.08	0	2.9	3.3	5.2	3.8
September	24.73	25.07	24.45	49.0	70.1	70.9	76.3	43.8	60.0	87	20	36	38	37	64	34	32	219	236	224	1.11	1.08	9	3.1	4.1	4.8	4.0
October	24.70	25.02	24.26	37.7	58.8	58.4	64.0	33.5	48.8	78	27	29	29	29	70	35	26	160	163	163	1.99	1.64	5	2.9	2.6	4.0	3.0
November	24.66	24.99	24.26	25.5	39.7	37.1	44.0	20.4	32.2	61	8	18	20	20	72	47	51	096	108	108	1.57	1.24	6.4	3.4	5.3	5.9	4.9
December	24.64	25.04	24.16	16.4	28.7	26.7	34.2	10.2	22.2	65	-16	10	15	14	73	56	60	069	087	085	1.01	1.67	10.4	4.6	7.1	7.5	6.8
Year	24.63	25.07	23.81	34.4	50.8	51.4	56.6	29.2	42.9	96	-31	25	27	26	72	45	43	158	173	161	16.23	1.38	65.0	3.9	5.1	5.8	4.9

LANSING, MICH.

[$\phi=42^{\circ}44' N.$; $\lambda=84^{\circ}26' W.$]

January	29.17	29.70	28.44	23.9	29.9	28.1	35.4	19.3	27.4	55	3	22	25	25	90	81	88	0.118	0.139	0.142	2.05	0.73	3.7	7.0	6.9	6.3	7.3
February	28.99	29.63	28.22	23.0	30.1	26.8	32.9	18.9	25.9	53	7	21	24	23	90	78	84	116	138	128	1.02	1.38	5.0	7.7	7.5	5.9	7.3
March	29.09	29.44	28.66	24.4	34.2	31.4	37.0	21.7	29.4	55	9	22	26	25	87	70	77	117	140	136	1.17	1.46	7.5	6.0	6.4	6.0	6.1
April	28.98	29.43	28.34	38.1	49.8	47.6	53.3	35.0	44.2	69	25	34	37	38	86	64	72	202	227	240	6.33	1.74	8.0	6.1	7.9	7.5	7.4
May	29.05	29.32	28.74	51.7	64.4	61.9	67.3	46.2	56.8	88	31	46	50	49	82	62	64	325	378	368	3.43	1.77	0	5.3	6.2	5.9	6.1
June	29.01	29.38	28.75	60.9	71.8	68.8	73.9	55.5	64.7	85	42	56	59	59	84	66	72	463	518	507	6.77	2.20	0	6.7	6.4	6.0	6.7
July	29.04	29.22	28.66	65.1	78.9	75.0	80.9	60.2	70.6	91	44	61	62	62	86	58	66	550	576	576	1.64	1.45	0	4.2	4.6	4.6	4.7
August	29.13	29.34	28.85	65.0	80.4	75.2	82.1	61.5	71.8	89	50	62	64	65	91	59	72	571	611	631	4.42	1.76	0	4.3	3.9	4.2	4.0
September	29.13	29.46	28.57	62.5	68.4	62.8	70.9	49.2	60.0	89	33	49	51	53	88	55	72	371	400	425	1.28	1.53	0	4.5	4.7	4.4	5.0
October	29.05	29.61	28.26	42.3	53.0	47.8	54.9	38.5	46.7	78	25	39	41	41	90	64	77	258	274	274	1.66	1.63	T	5.8	6.9	5.1	6.7
November	29.07	29.62	28.47	33.2	41.0	36.5	44.0	29.0	36.5	63	15	30	32	30	87	71	76	172	187	168	2.29	1.34	6.8	7.3	6.8	6.4	7.0
December	29.13	29.67	28.66	22.8	28.2	25.8	30.2	19.0	24.6	43	1	21	24	23	92	84	89	113	131	126	1.54	1.45	8.0	7.5	8.5	8.1	8.4
Year	29.07	29.70	28.22	41.9	52.5	49.0	55.2	37.8	46.6	91	1	39	41	41	88	68	76	281	310	310	33.60	2.20	39.0	6.0	6.4	5.9	6.3

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

KNOXVILLE, TENN.

[H=921 ft.; H_b=995 ft.; h_i=66 ft.; h_r=57 ft.; h_a=84 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from											Precipitation	Snow			Fog		Maximum temp.	32° or below	Elec- tricity				
	Average hourly ve- locity	Prevaling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	Mi. 6.7	NE.	22	SE.	0	2	20	12	1	4	9	12	4	1	1	9	21	18	17	0	0	0	23	7	0	0	1	0	0
February	7.5	W.	29	W.	0	4	8	10	2	4	8	11	8	1	8	5	15	16	14	8	3	0	11	0	0	0	16	2	0
March	6.6	W.	22	W.	0	6	12	9	1	4	8	14	7	1	15	7	9	9	7	5	2	0	8	1	0	0	10	1	0
April	6.8	W.	25	SW.	0	2	10	12	4	2	13	10	5	2	14	5	11	11	9	0	0	1	3	0	0	0	7	0	0
May	5.3	NE.	23	NW.	0	6	11	9	4	3	13	9	3	4	12	9	10	9	8	0	0	0	8	2	0	3	0	10	0
June	5.4	NE.	20	SW.	0	4	17	9	4	2	8	10	5	1	5	22	3	15	10	0	0	0	5	1	0	8	0	15	0
July	5.0	W.	21	SW.	0	5	8	12	1	6	11	11	6	2	10	16	5	12	7	0	0	0	12	3	0	11	0	17	0
August	4.6	E.	18	NW.	0	0	15	19	3	5	10	8	0	2	16	7	8	12	11	0	0	0	17	4	0	13	0	12	0
September	4.9	NE.	21	W.	0	6	11	15	5	5	6	6	1	5	18	5	13	7	6	0	0	0	16	5	0	4	0	4	0
October	5.8	NE.	21	W.	0	2	14	11	3	3	6	15	7	1	11	7	13	11	8	1	0	0	16	3	0	0	1	1	0
November	6.0	NE.	26	W.	0	3	14	11	2	1	4	11	7	7	13	5	12	10	9	3	0	0	9	4	2	0	13	0	0
December	5.3	W.	15	SW.	0	1	7	10	3	6	10	11	6	8	8	6	17	13	9	6	4	0	17	6	4	0	13	0	0
Year	5.8	NE.	29	W.	0	41	147	139	33	42	106	128	59	35	131	103	131	143	115	23	9	2	145	36	6	39	54	69	0

LA CROSSE, WIS.

[H=674 ft.; H_b=714 ft.; h_i=11 ft.; h_r=3 ft.; h_a=48 ft.]

January	5.6	S.	18	W.	0	3	2	2	5	17	9	15	8	1	13	5	13	11	9	14	10	0	12	1	24	0	31	0	0
February	6.2	W.	17	N.	0	3	1	1	4	14	5	14	13	1	9	7	12	9	5	18	6	0	9	1	21	0	28	0	0
March	5.8	NW.	17	NW.	0	11	4	2	3	8	6	6	21	1	13	7	11	7	4	12	6	0	14	1	6	0	30	0	0
April	6.8	NW.	20	W.	0	9	7	12	5	11	1	5	10	0	6	5	19	16	11	3	2	0	9	0	0	0	7	2	1
May	6.0	S.	20	NW.	0	3	7	5	12	14	6	3	12	0	12	9	10	9	7	0	0	0	7	1	0	0	0	5	1
June	4.9	NW.	21	SW.	0	9	5	1	8	9	10	9	9	0	8	10	12	10	8	0	0	0	11	1	0	1	0	5	2
July	4.9	S.	18	NW.	0	7	2	1	6	21	16	4	5	0	17	12	2	5	4	0	0	1	3	0	0	10	0	4	0
August	4.7	S.	14	S.	0	4	1	1	11	29	3	3	9	1	16	11	4	7	6	0	0	0	8	1	0	11	0	6	4
September	5.2	S.	15	SW.	0	8	2	2	7	23	1	11	6	0	15	9	6	7	6	0	0	0	6	1	0	4	0	4	2
October	5.7	NW.	16	N.	0	11	1	2	14	6	7	6	15	0	10	10	11	9	8	3	0	1	19	5	0	0	8	1	4
November	7.0	S.	19	W.	0	2	0	1	7	13	9	15	13	0	9	5	16	6	4	9	2	1	4	0	10	0	21	4	0
December	6.0	W.	17	NW.	0	6	4	2	5	15	4	12	14	0	3	6	22	11	7	17	6	0	10	2	20	0	30	0	0
Year	5.7	S.	21	SW.	0	76	36	32	87	180	77	103	135	4	131	96	138	107	79	76	32	3	112	14	81	26	155	31	14

LANDER, WYO.

[H=5,351 ft.; H_b=5,352 ft.; h_i=60 ft.; h_r=54 ft.; h_a=68 ft.]

January	3.8	SW.	19	W.	0	5	5	9	11	3	13	9	4	3	16	12	3	6	3	8	6	0	0	0	29	0	31	0	0
February	5.8	SW.	51	SW.	3	9	5	3	6	5	12	10	6	0	13	11	4	4	3	7	4	0	0	0	9	0	28	0	0
March	4.6	SW.	23	NW.	0	2	7	8	5	5	11	11	9	4	12	7	12	7	6	10	7	0	0	0	5	0	30	0	0
April	6.5	SW.	32	SW.	1	3	5	6	5	7	16	13	5	0	5	17	8	11	8	9	8	0	1	0	0	0	22	1	0
May	6.2	SW.	32	SW.	1	4	5	9	4	4	18	11	7	0	10	10	11	7	5	0	0	0	1	0	0	0	1	3	1
June	5.7	SW.	41	SW.	4	3	1	7	6	2	22	11	8	0	7	13	10	13	9	3	1	2	3	0	0	2	1	8	0
July	5.0	SW.	41	W.	1	2	6	6	6	3	21	8	10	0	9	14	8	12	10	0	0	1	0	0	0	8	0	12	0
August	6.1	SW.	32	W.	2	1	6	2	1	5	22	18	6	1	18	8	5	3	1	0	0	0	0	0	0	7	0	7	0
September	5.1	SW.	32	SW.	1	0	12	7	2	3	16	10	8	2	15	10	5	3	1	1	1	0	0	0	0	0	3	4	0
October	4.9	SW.	30	N.	0	4	5	10	0	7	20	9	6	1	19	9	3	8	4	2	1	0	0	0	0	0	10	0	2
November	5.1	SW.	38	W.	1	1	4	9	4	8	16	13	5	0	11	12	7	4	4	8	4	0	2	2	4	0	30	0	0
December	4.9	SW.	40	W.	2	1	5	8	7	6	20	9	6	0	6	8	17	7	5	11	7	0	3	1	15	0	31	0	0
Year	5.3	SW.	51	SW.	16	35	66	84	57	58	207	132	80	11	141	131	93	85	59	59	39	3	10	3	62	17	187	35	3

LANSING, MICH.

[H=856 ft.; H_b=878 ft.; h_i=5 ft.; h_r=3 ft.; h_a=90 ft.]

January	10.9	SW.	27	SW.	0	3	4	5	11	6	18	6	9	0	6	6	19	13	11	15	4	0	3	0	10	0	29	0	0
February	11.2	SW.	28	W.	0	3	4	1	7	9	12	10	10	0	3	11	14	10	8	17	7	0	1	1	18	0	27	0	0
March	10.0	NW.	23	W.	0	7	6	2	2	5	6	10	24	0	9	7	15	9	5	17	8	0	1	0	8	0	31	0	0
April	10.3	E.	32	S.	1	4	8	11	11	4	7	6	9	0	6	4	20	15	12	5	2	0	3	0	0	0	11	4	0
May	7.8	S.	21	NW.	0	10	6	6	6	8	8	8	10	0	8	9	14	13	11	0	0	2	2	1	0	0	2	5	0
June	7.4	S.	22	S.	0	10	4	2	7	14	6	4	12	1	5	11	14	12	10	0	0	1	3	0	0	0	0	8	0
July	6.9	S.	21	W.	0	3	4	7	4	12	16	10	5	1	15	9	7	9	8	0	0	0	1	0	0	0	5	0	9
August	6.1	S.	20	N.	0	3	5	7	10	16	11	4	6	0	16	10	5	10	9	0	0	0	4	0	0	0	0	5	0
September	7.6	S.	23	NW.	0	4	6	6	6	12	10	4	10	2	7	16	7	6	5	0	0	0	2	0	0	0	0	1	0
October	8.6	NW.	30	SW.	0	4	3	5	6	9	10	11	14	0	7	8	16	10	6	4	1	0	4	0	0	0	11	0	1
November	10.6	SW.	27	W.	0	0	0	3	6	5	25	8	13	0	6	8	16	13	8	11	6	0	2	0	8	0	19	2	0
December	8.5	SW.	21	SW.	0	3	6	7	4	7	18	8	9	0	3	3	25	12	8	15	9	0	2	0	15	0	31	0	0
Year	8.8	SW.	32	S.	1	54	56	62	80	107	147	89	131	4	91	102	172	132	101	84	37	3	28	2	59	5	161	34	2

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

LINCOLN, NEBR.

[$\phi=40^{\circ}49' N.$; $\lambda=96^{\circ}45' W.$]

Month	Pressure			Temperature								Moisture															
	Extremes			Mean					Extremes			Dew point	Relative humidity	Vapor pressure			Precipitation		Cloudiness								
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum			7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight	
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>					
January	28.81	29.23	28.10	8.6	15.9	16.9	23.0	3.4	13.2	44	-12	4	8	11	82	71	76	0.057	0.066	0.077	1.37	0.94	10.0	4.2	4.4	4.6	4.5
February	28.74	29.45	27.91	21.2	28.1	28.8	33.0	17.0	25.0	49	-3	15	17	18	76	62	64	.091	.098	.105	.21	.07	1.9	4.3	5.4	5.0	5.3
March	28.81	29.17	27.79	30.8	41.2	41.5	45.6	27.6	36.6	73	14	25	27	28	78	58	60	.138	.156	.162	2.38	1.41	2.6	6.1	7.5	5.8	6.7
April	28.60	29.01	28.08	43.4	56.4	57.3	61.0	41.2	51.1	87	27	36	36	36	75	51	50	.216	.220	.223	1.22	.87	T	6.6	7.0	6.0	6.6
May	28.67	28.99	28.32	56.2	71.4	71.9	75.7	53.3	64.5	94	37	49	51	51	78	51	52	.362	.386	.398	1.89	.63	.0	5.7	5.9	5.1	5.8
June	28.66	28.96	28.30	64.2	79.5	80.2	83.7	61.7	72.7	106	46	58	56	57	80	47	48	.491	.464	.486	3.79	1.27	.0	6.0	5.1	4.3	5.4
July	28.68	28.91	28.37	71.1	88.4	89.1	92.6	69.1	80.8	105	57	62	60	60	73	41	40	.555	.530	.526	3.10	1.12	.0	3.0	4.5	3.3	3.7
August	28.68	28.97	28.39	74.2	92.0	92.3	96.1	72.5	84.3	106	59	63	62	62	71	39	38	.591	.567	.559	1.69	.70	.0	4.1	3.0	3.2	3.4
September	28.76	29.16	28.48	60.6	78.3	77.9	82.7	57.9	70.3	99	39	49	49	48	68	37	37	.377	.369	.356	1.11	.60	.0	3.9	3.5	3.8	4.0
October	28.76	29.32	28.27	45.8	59.6	58.9	64.6	43.3	54.0	87	27	38	39	40	75	50	51	.242	.251	.254	2.29	1.16	.0	4.6	4.4	3.9	4.5
November	28.82	29.30	28.16	32.4	43.7	42.1	47.6	28.3	38.0	76	4	24	24	25	70	46	51	.138	.133	.142	.14	.07	1.6	4.3	5.4	3.5	4.7
December	28.84	29.21	28.42	22.5	32.4	32.2	37.9	18.8	28.4	60	0	17	19	20	78	59	62	.099	.115	.120	.17	.05	1.1	3.5	5.6	3.5	4.8
Year	28.74	29.45	27.79	44.2	57.2	57.4	62.0	41.2	51.6	106	-12	37	37	38	75	51	52	.280	.280	.284	19.36	1.41	17.2	4.7	5.1	4.3	5.0

LITTLE ROCK, ARK.

[$\phi=34^{\circ}45' N.$; $\lambda=92^{\circ}16' W.$]

January	29.72	30.10	29.22	39.7	43.5	43.0	48.7	34.9	41.8	71	20	36	38	38	88	82	84	0.236	0.244	0.251	18.04	4.56	T	8.3
February	29.71	30.25	29.11	38.5	47.9	48.6	52.9	35.5	44.2	78	23	30	32	30	70	56	52	.183	.208	.188	2.00	1.60	T	5.8
March	29.71	30.00	29.15	41.4	52.4	53.9	58.0	39.6	48.8	90	26	35	34	36	77	52	53	.213	.210	.226	2.22	.93	1.2	5.6
April	29.55	30.00	29.17	53.6	67.2	68.9	72.1	51.9	62.0	98	34	46	44	45	78	46	44	.340	.317	.328	1.90	.77	.0	5.5
May	29.59	29.80	29.41	64.3	77.9	77.3	81.5	62.3	71.9	93	50	58	58	58	80	52	54	.487	.493	.496	2.78	1.24	.0	5.2
June	29.57	29.84	29.29	73.5	85.2	84.6	88.6	70.8	79.7	98	60	67	66	67	82	54	57	.672	.635	.659	1.66	.81	.0	5.0
July	29.62	29.82	29.47	74.0	85.5	85.9	89.6	71.7	80.6	95	66	68	66	68	81	54	56	.679	.654	.682	1.62	.69	.0	6.1
August	29.62	29.84	29.42	75.2	89.0	86.7	92.5	73.6	83.0	106	69	70	69	70	85	52	59	.738	.704	.724	4.68	1.39	.0	4.5
September	29.66	29.94	29.44	65.7	78.8	77.7	82.4	64.6	73.5	92	49	61	60	61	86	54	59	.568	.554	.571	5.75	3.25	.0	3.8
October	29.66	30.08	29.18	53.7	66.2	65.4	70.4	51.6	61.0	88	31	48	48	50	82	55	61	.362	.365	.395	5.00	2.47	.0	4.3
November	29.77	30.29	29.32	43.5	52.2	51.7	56.4	41.0	48.7	82	19	37	37	38	77	58	61	.244	.243	.251	3.74	1.35	T	5.7
December	29.79	30.19	29.19	39.5	45.5	46.5	49.8	36.3	43.0	66	16	36	36	37	80	72	72	.224	.250	.258	3.57	1.33	.1	6.9
Year	29.66	30.29	29.11	55.2	65.9	65.8	70.2	52.8	61.5	106	16	49	49	50	80	57	59	.412	.406	.419	52.96	4.56	1.3	5.6

LOS ANGELES, CALIF.

[$\phi=34^{\circ}03' N.$; $\lambda=118^{\circ}15' W.$]

January	29.69	29.95	29.32	42.3	53.0	52.7	55.2	40.3	47.8	61	32	30	29	32	62	42	49	0.173	0.170	0.196	1.99	0.55	0.0	3.1
February	29.70	29.94	29.24	49.4	60.1	59.4	63.1	47.5	55.3	76	42	41	38	43	75	50	58	.264	.244	.287	7.87	3.50	.0	4.2
March	29.62	29.89	29.28	51.7	64.3	62.7	66.9	50.1	58.5	83	43	42	41	44	73	47	53	.276	.268	.291	4.04	1.77	.0	3.9
April	29.62	29.81	29.43	54.3	69.3	67.2	71.8	52.8	62.3	86	48	45	44	44	73	44	47	.302	.297	.302	.24	.14	.0	3.1
May	29.55	29.75	29.30	58.1	69.2	67.9	71.2	56.7	64.0	86	51	52	53	52	82	59	60	.397	.404	.399	.28	.17	.0	6.5
June	29.56	29.71	29.41	60.2	73.9	72.1	76.0	59.6	67.8	92	55	56	57	56	86	57	58	.448	.468	.453	.00	.00	.0	6.2
July	29.55	29.72	29.37	63.2	78.4	75.7	80.4	62.3	71.4	94	58	60	60	60	88	53	59	.512	.510	.513	.00	.00	.0	7.4
August	29.55	29.71	29.40	63.2	78.6	75.9	80.9	62.3	71.6	95	60	60	60	60	90	54	59	.522	.520	.527	.00	.00	.0	7.3
September	29.54	29.72	29.37	64.3	80.0	76.0	81.8	63.0	72.4	95	59	57	58	57	79	49	54	.473	.484	.476	.00	.00	.0	4.2
October	29.59	29.71	29.47	60.0	74.9	70.4	77.0	58.1	67.6	92	52	52	53	54	79	50	59	.401	.405	.426	.01	.01	.0	3.1
November	29.68	29.80	29.52	54.8	67.5	63.8	70.1	53.3	61.7	83	46	49	49	52	80	54	68	.347	.355	.397	.00	.00	.0	4.0
December	29.68	29.93	29.44	55.5	68.1	65.8	70.6	53.2	61.9	80	43	42	41	45	63	42	51	.276	.267	.306	3.54	1.67	.0	3.0
Year	29.61	29.95	29.24	56.4	69.8	67.5	72.1	54.9	63.5	95	32	49	49	50	78	50	56	.366	.366	.381	17.97	3.50	.0	4.7

LOUISVILLE, KY.

[$\phi=38^{\circ}15' N.$; $\lambda=85^{\circ}45' W.$]

January	29.59	29.97	29.05	37.8	42.1	41.9	47.7	32.8	40.2	67	18	34	36	35	86	79	77	0.208	0.227	0.224	19.17	4.25	T	8.9	8.6	7.9	8.6
February	29.52	30.10	28.82	32.9	38.1	38.6	44.1	27.6	35.8	73	13	26	28	29	76	67	69	.155	.165	.171	1.65	.38	6.8	6.4	6.4	5.4	6.6
March	29.51	29.81	28.85	35.9	45.1	45.3	50.5	32.8	41.6	70	21	30	32	31	78	60	59	.174	.191	.175	.76	.30	3.8	5.8	5.8	4.8	5.4
April	29.37	29.90	28.87	49.9	59.5	58.7	64.7	45.9	55.3	84	35	41	46	46	73	62	66	.277	.332	.339	4.06	.99	.0	5.8	6.2	7.0	6.2
May	29.43	29.64	29.18	60.5	70.6	70.4	74.6	57.0	65.8	94	46	52	55	54	76	60	59	.410	.441	.430	3.84	1.19	.0	5.5	4.9	4.5	5.0
June	29.39	29.73	29.11	70.1	79.8	77.8	83.5	66.7	75.1	92	55	63	62	63	78	57	62	.583	.582	.593	4.14	1.48	.0	5.6	6.8	5.2	5.9
July	29.44	29.66	29.24	70.7	83.3	81.6	87.0	67.5	77.2	94	56	62	60	62	75	56	53	.571	.526	.565	.93	.42	.0	3.7	5.1	4.3	4.4
August	29.48	29.67	29.28	71.8	83.6	82.7	88.3	70.1	79.2	94	64	66	66	68	83	58	62	.648	.651	.677	4.27	2.88	.0	4.3	5.1	3.1	4.2
September	29.51	29.81	29.18	60.2	73.9	71.8	78.4	57.4	67.9	92	43	54	52	52	78	49	53	.437	.413	.425	1.09	.47	.0	3.8	4.1	2.0	3.4
October	29.48	29.94	28.92	50.0	60.8	58.6	64.4	47.5	56.0	87	31	44	45	44	79	58	60	.310	.322	.320	4.48	1.89	1.2	6.4	6.4	5.2	6.0
November	29.56	30.14	28.91	38.6	46.2	45.8	51.1	35.5	43.3	76	16	31	31	32	75	59	62	.189	.186	.195	1.66	.85	T	6.1	6.4	4.1	5.8
December	29.60	30.02	28.94	31.7	36.3	37.5	40.6	28.1	34.4	59	9	27	27	30	80	71	76	.158	.169	.189	3.58	1.40	.4	8.0	7.4	7.6	7.7
Year	29.49	30.14	28.82	50.8	59.9	59.2	64.6	47.4	56.0	94	9	44	45	46	78	60	63	.343	.350	.359	49.63	4.25	12.2	5.9	6.1	5.1	5.7

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

LINCOLN, NEBR.

[H=1,180 ft.; H_b=1,189 ft.; h_i=11 ft.; h_r=4 ft.; h_a=81 ft.]

Month	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from											Precipitation	Snow		Fog		Maximum temp.		32° temperature or below	Elec- tricity					
	Average hourly ve- locity	Prevaling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature	Thunderstorm	Aurora	
January	11.1	S.	34	NW.	1	10	6	7	5	11	6	3	14	0	15	5	11	9	7	13	8	0	4	1	23	0	31	0	0	
February	11.8	NW.	37	NW.	2	13	0	2	6	13	3	6	12	1	10	8	10	7	2	8	6	0	2	0	12	0	25	0	0	
March	10.4	N.	33	N.	2	21	1	10	6	13	4	2	4	1	6	10	15	6	6	11	2	0	0	0	6	0	23	2	0	
April	13.0	N.	48	NW.	4	14	4	5	8	9	2	4	14	0	4	11	15	8	5	2	2	0	1	0	0	0	3	1	0	
May	9.8	S.	27	N.	0	12	3	5	11	19	3	4	5	0	7	13	11	12	9	0	0	0	0	0	0	2	0	4	0	
June	9.6	SE.	32	SW.	1	7	11	5	12	10	4	6	5	0	12	6	12	12	0	0	1	2	0	0	0	9	0	9	0	
July	8.6	S.	38	S.	2	2	7	9	14	19	4	2	3	2	14	12	5	6	5	0	0	0	0	0	0	22	0	7	0	
August	9.4	S.	32	NW.	2	7	3	5	27	19	0	1	0	0	17	13	1	7	6	0	0	0	1	0	0	25	0	8	0	
September	9.8	S.	32	NW.	1	9	4	6	9	22	3	1	5	1	16	7	7	8	5	0	0	0	1	1	0	7	0	4	0	
October	9.0	N.	37	W.	1	16	2	6	10	12	4	6	6	0	15	8	8	7	6	0	0	1	4	0	0	4	1	2	0	
November	10.7	S.	35	NW.	1	14	1	2	5	19	3	8	7	1	12	9	9	3	2	7	3	0	0	0	7	0	16	0	0	
December	9.9	S.	35	NW.	1	9	5	2	8	16	3	6	12	1	13	9	9	7	1	6	4	0	2	2	10	0	30	0	0	
Year	10.3	S.	48	NW.	18	134	47	64	121	182	39	49	87	7	141	111	113	92	66	47	25	2	17	4	58	65	132	36	2	

LITTLE ROCK, ARK.

[H=324 ft.; H_b=357 ft.; h_i=94 ft.; h_r=87 ft.; h_a=102 ft.]

January	8.4	E.	24	NW.	0	8	11	17	7	8	2	5	4	0	3	1	27	19	18	2	0	0	17	5	1	0	14	4	0
February	9.9	S.	31	NW.	0	4	12	7	2	16	4	3	8	0	8	8	12	7	7	2	1	0	4	1	1	0	13	1	0
March	8.8	NE.	30	SW.	0	6	15	8	8	7	7	4	7	0	9	8	14	9	5	2	2	0	11	1	0	0	7	4	0
April	9.5	S.	33	W.	1	4	4	3	9	10	9	8	13	0	9	10	11	8	6	0	0	0	3	0	0	0	0	7	0
May	7.7	SW.	21	NW.	0	6	1	11	8	11	15	7	2	1	10	12	9	9	6	0	0	0	4	1	0	5	0	7	0
June	7.1	SW.	22	W.	0	2	8	3	5	15	14	7	4	2	10	9	11	11	7	0	0	0	4	0	0	14	0	13	0
July	7.3	SW.	34	W.	1	1	2	13	6	10	20	9	0	1	8	14	9	9	7	0	0	0	3	0	0	17	0	10	0
August	6.4	SW.	21	SW.	0	1	3	13	4	11	20	9	1	0	11	12	8	12	9	0	0	0	4	1	0	24	0	10	0
September	6.9	E.	19	SW.	0	5	5	17	4	10	8	3	6	2	14	8	8	8	5	0	0	0	4	0	0	1	0	5	0
October	8.0	E.	32	W.	1	5	10	10	5	7	10	4	7	4	18	3	10	9	8	0	0	0	10	1	0	0	1	1	0
November	8.2	E.	23	NW.	0	7	6	17	4	9	6	6	3	2	10	8	12	9	7	2	1	0	5	2	1	0	8	1	0
December	7.4	E.	21	NW.	0	11	10	13	5	9	8	2	4	0	6	5	20	14	8	1	1	0	18	5	2	0	11	2	0
Year	7.9	E.	34	W.	3	60	87	132	67	123	123	67	59	12	116	98	151	124	93	9	5	0	85	17	5	61	54	65	0

LOS ANGELES, CALIF.

[H=261 ft.; H_b=338 ft.; h_i=159 ft.; h_r=151 ft.; h_a=192 ft.]

January	6.7	NE.	21	NW.	0	7	21	1	3	7	11	3	9	0	19	5	7	8	6	0	0	1	1	0	0	0	1	1	0
February	6.3	NE.	22	SE.	0	4	14	8	3	3	19	3	2	0	13	3	12	7	6	0	0	0	7	1	0	0	0	0	0
March	6.5	SW.	19	S.	0	6	14	5	2	1	23	7	4	0	17	7	7	6	6	0	0	1	3	0	0	0	0	2	0
April	6.2	SW.	23	NW.	0	3	13	5	7	7	21	1	3	0	17	9	4	2	2	0	0	0	6	3	0	0	0	0	0
May	5.4	SW.	15	SW.	0	2	6	7	14	7	22	4	0	0	10	11	5	2	0	0	0	5	2	0	0	0	1	0	
June	5.7	SW.	15	SW.	0	1	6	11	6	6	25	5	0	0	20	8	2	0	0	0	0	0	6	1	0	1	0	0	
July	5.6	SW.	14	W.	0	0	2	4	9	10	26	10	1	0	20	10	1	0	0	0	0	0	14	1	0	2	0	0	
August	5.3	SW.	14	W.	0	1	1	6	9	9	23	10	3	0	20	11	0	0	0	0	0	0	15	1	0	1	0	0	
September	5.1	SW.	15	W.	0	0	5	10	7	5	21	8	4	0	20	6	4	0	0	0	0	3	0	0	0	4	0	0	
October	4.9	SW.	14	W.	0	4	12	5	3	3	21	11	3	0	22	6	3	1	0	0	0	0	10	6	0	1	0	0	
November	5.1	SW.	14	NW.	0	9	13	3	2	1	18	12	2	0	14	10	6	0	0	0	0	0	12	3	0	0	0	0	
December	6.1	NE.	20	NW.	0	9	16	5	3	6	11	7	5	0	18	7	6	8	5	0	0	0	6	0	0	0	0	0	
Year	5.7	SW.	23	NW.	0	46	123	70	68	65	241	81	36	0	210	92	63	37	27	0	0	2	88	18	0	9	1	4	0

LOUISVILLE, KY.

[H=466 ft.; H_b=525 ft.; h_r=188 ft.; h_i=183 ft.; h_a=234 ft.]

January	11.2	N.	30	S.	0	10	8	7	10	9	6	5	7	0	3	3	25	19	18	2	0	0	14	4	1	0	16	3	0
February	12.9	S.	41	SW.	3	7	1	2	10	9	8	12	7	0	7	10	11	12	10	11	6	0	2	1	2	0	21	0	0
March	11.0	N.	39	SW.	2	17	3	4	4	8	8	6	12	0	12	10	9	7	3	7	3	0	0	1	0	0	16	0	0
April	11.3	SW.	35	S.	1	6	5	6	10	9	8	6	10	0	7	10	13	12	11	0	0	1	1	1	0	0	6	0	0
May	9.1	N.	33	SW.	1	14	4	8	13	9	5	3	6	0	14	6	11	9	7	0	0	1	0	0	0	2	3	0	0
June	8.9	N.	45	NE.	2	14	5	7	6	8	7	5	8	0	6	17	7	8	8	0	0	1	2	1	0	3	0	10	0
July	8.4	SW.	29	W.	0	13	8	2	5	12	15	3	4	0	12	13	6	7	4	0	0	0	0	0	0	12	0	5	0
August	7.6	N.	35	SW.	1	21	8	11	4	9	4	1	3	1	18	5	8	10	8	0	0	1	0	0	0	11	0	7	0
September	8.9	N.	25	NW.	0	16	9	1	9	11	4	0	9	1	18	7	5	5	4	0	0	0	0	0	0	3	0	3	0
October	10.9	S.	37	SW.	1	12	6	7	5	15	6	3	8	0	10	7	14	14	13	2	1	0	1	1	0	0	3	0	0
November	10.2	NW.	29	W.	0	5	6	3	8	13	6	9	10	0	9	11	10	9	5	4	2	0	4	2	1	0	12	1	0
December	9.6	SW.	27	SW.	0	7	3	8	3	8	16	13	4	0	5	5	21	14	10	3	1	0	4	1	9	0	21	0	0
Year	10.0	N.	45	NE.	11	142	66	66	87	120	93	66	88	2	121	104	140	126	101	29	13	4	28	12	13	31	89	38	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

LYNCHBURG, VA.

[$\phi=37^{\circ}25'$ N.; $\lambda=79^{\circ}09'$ W.]

Month	Pressure			Temperature									Moisture														
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation		Cloudiness							
	Monthly mean	Maximum	Minimum	730 a. m.	Noon, local time	730 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	730 a. m.	Noon, local time	730 p. m.	730 a. m.	Noon, local time	730 p. m.	730 a. m.	Noon, local time	730 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	730 a. m.	Noon, local time	730 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	h. m.	
January.....	29.51	29.95	28.99	42.7	47.7	45.8	53.0	37.6	45.3	74	25	38	40	39	85	76	79	0.249	0.265	0.254	8.49	2.41	0.0	8.7	8.3	7.5	8.6
February.....	29.29	29.74	28.68	34.3	42.2	42.2	48.2	31.1	39.6	68	18	27	29	31	75	61	64	.160	.176	.188	2.82	1.05	5.3	6.1	6.1	5.7	6.1
March.....	29.25	29.70	28.83	37.9	50.2	48.6	55.2	35.1	45.2	70	18	30	36	34	73	60	58	.174	.224	.203	1.63	1.45	3.0	4.8	4.4	3.4	4.2
April.....	29.24	29.68	28.79	49.5	61.2	59.2	66.7	45.4	56.0	92	32	41	40	40	74	51	55	.265	.264	.265	5.07	2.82	T	5.3	5.3	5.1	5.1
May.....	29.28	29.68	29.03	59.3	74.2	71.0	79.0	53.9	66.4	93	37	52	50	51	76	44	53	.399	.370	.401	2.93	1.55	.0	4.3	4.5	3.5	3.9
June.....	29.22	29.53	28.92	70.9	83.1	76.6	86.6	65.2	75.9	96	57	65	65	65	82	57	69	.616	.640	.621	6.24	2.46	.0	5.0	4.9	6.4	5.5
July.....	29.30	29.50	29.08	70.8	81.6	77.2	85.6	66.0	75.8	98	57	64	63	66	80	55	69	.601	.588	.639	5.97	3.28	.0	5.2	5.4	5.9	5.4
August.....	29.36	29.60	29.20	70.0	83.4	76.4	86.0	66.9	76.4	93	59	67	67	68	90	60	76	.657	.665	.678	4.89	.91	.0	4.8	5.6	4.9	5.4
September.....	29.37	29.80	28.96	58.3	73.3	68.0	77.2	55.4	66.3	94	43	55	54	59	89	54	73	.449	.447	.506	2.61	1.35	.0	3.3	4.5	3.2	4.0
October.....	29.33	29.86	28.67	48.9	61.7	57.2	65.4	45.2	55.3	85	31	44	42	44	83	52	64	.304	.299	.316	7.91	3.18	.0	5.4	6.4	4.9	5.8
November.....	29.38	29.94	28.81	39.1	52.7	48.2	56.2	35.7	46.0	73	18	31	32	34	74	47	58	.192	.199	.210	2.14	.98	.0	4.7	4.9	3.9	4.4
December.....	29.42	29.86	28.86	33.9	43.7	41.5	47.5	30.8	39.2	68	13	27	29	29	75	56	62	.158	.174	.177	1.03	.39	1.9	4.9	5.9	5.1	5.7
Year.....	29.33	29.95	28.67	51.3	62.9	59.3	67.2	47.4	57.3	98	13	45	46	47	80	56	65	.352	.359	.372	51.73	3.28	10.2	5.2	5.5	5.0	5.3

MACON, GA.

[$\phi=32^{\circ}50'$ N.; $\lambda=83^{\circ}38'$ W.]

January.....	29.78	30.07	29.46	55.2	61.0	59.7	66.1	51.6	58.8	79	27	52	54	53	89	78	81	0.410	0.438	0.426	4.21	1.05	0.0	9.0	8.7	7.1	8.5
February.....	29.68	30.09	29.20	42.3	53.2	52.6	59.0	39.0	49.0	76	25	35	34	35	77	52	53	.231	.226	.226	5.08	2.04	.0	5.6	6.0	5.1	5.6
March.....	29.62	30.06	29.34	45.1	60.7	60.0	65.8	42.9	54.4	78	29	38	36	37	77	42	47	.247	.229	.245	3.92	3.24	.0	4.6	5.1	4.5	4.8
April.....	29.59	30.05	29.27	54.4	69.1	68.8	74.0	51.1	62.6	89	35	48	44	47	79	44	49	.350	.310	.346	6.68	2.47	.0	4.6	4.0	3.7	4.2
May.....	29.61	29.81	29.39	65.7	79.7	78.5	84.3	61.6	73.0	95	51	58	56	57	78	46	50	.499	.475	.482	2.38	.99	.0	3.8	3.9	4.8	4.0
June.....	29.57	29.76	29.26	74.6	87.5	83.0	90.8	70.6	80.7	97	64	68	65	66	80	49	59	.661	.630	.644	1.81	.78	.0	5.0	6.1	6.9	6.0
July.....	29.63	29.83	29.50	74.5	85.3	82.9	89.7	71.1	80.4	97	58	69	67	68	83	56	64	.708	.668	.700	4.71	2.49	.0	5.5	6.3	6.9	6.2
August.....	29.66	29.90	29.51	73.9	86.2	81.4	89.5	70.8	80.2	93	64	70	69	70	89	56	69	.740	.701	.734	3.17	.93	.0	6.2	6.2	6.3	6.2
September.....	29.65	29.97	29.31	65.8	79.4	76.0	82.9	63.6	73.2	93	52	62	60	61	84	53	62	.564	.532	.553	.53	.24	.0	4.3	5.8	4.7	5.4
October.....	29.65	30.03	29.32	55.5	70.1	65.7	73.3	53.7	63.5	89	32	51	49	52	85	50	63	.409	.387	.429	3.96	1.76	.0	5.4	5.2	4.0	5.1
November.....	29.73	30.26	29.25	43.2	58.4	54.6	61.6	40.5	51.0	78	21	37	36	38	80	46	57	.243	.246	.256	1.77	1.08	.0	5.8	4.4	3.3	4.7
December.....	29.79	30.12	29.34	39.5	53.1	51.0	57.3	37.1	47.2	71	15	34	35	36	79	51	58	.208	.226	.246	2.77	1.81	.8	5.4	4.7	3.6	5.0
Year.....	29.66	30.26	29.20	57.5	70.3	67.8	74.5	54.5	64.5	97	15	52	50	52	82	52	59	.439	.422	.441	40.99	3.27	.8	5.5	5.5	5.1	5.5

MADISON, WIS.

[$\phi=43^{\circ}05'$ N.; $\lambda=89^{\circ}23'$ W.]

January.....	29.02	29.54	28.22	12.8	18.2	18.8	25.4	7.2	16.3	39	-7	10	13	15	86	79	84	0.076	0.089	0.093	3.31	1.40	6.6	5.0	6.6	4.8	6.1
February.....	28.87	29.59	28.09	16.0	21.0	21.0	27.6	11.5	19.6	43	-9	13	15	16	86	76	80	.089	.092	.096	1.63	1.18	4.4	5.5	5.8	5.9	5.9
March.....	29.03	29.36	28.58	24.5	31.0	31.8	35.4	22.1	28.8	53	5	20	20	22	82	64	67	.111	.112	.123	1.60	.61	9.9	6.5	5.8	5.0	5.8
April.....	28.84	29.31	28.28	38.7	46.0	46.9	50.5	36.2	43.4	70	27	33	33	35	80	64	67	.192	.197	.215	3.54	1.21	T	7.8	8.0	7.0	7.7
May.....	28.94	29.19	28.58	52.1	62.7	64.3	68.0	49.2	58.6	89	36	45	46	47	77	56	55	.313	.328	.340	1.49	.55	.0	6.1	6.5	5.1	6.3
June.....	28.91	29.29	28.55	61.4	71.0	70.7	74.3	58.4	66.4	94	44	55	54	54	80	56	59	.453	.444	.449	3.15	1.22	.0	7.0	7.0	6.0	6.7
July.....	28.93	29.12	28.62	68.2	80.1	80.3	84.5	65.5	75.0	94	55	59	58	59	72	49	49	.508	.501	.510	1.49	.23	.0	4.2	4.3	3.7	4.1
August.....	28.99	29.21	28.70	68.0	81.8	81.2	85.6	65.8	75.7	98	53	61	62	62	79	52	54	.537	.555	.558	.67	.26	.0	4.7	5.3	4.5	4.9
September.....	29.01	29.29	28.55	55.6	67.7	66.1	72.7	53.2	63.0	92	39	48	49	49	78	54	55	.368	.382	.375	5.48	3.04	.0	3.9	5.1	4.3	4.6
October.....	28.95	29.46	28.10	43.3	51.8	49.7	55.4	40.2	47.8	82	27	37	39	38	80	64	65	.242	.262	.249	2.85	2.31	T	5.8	6.7	5.3	6.3
November.....	28.97	29.56	28.30	29.2	36.1	34.5	40.6	25.2	32.9	63	5	24	25	25	82	64	69	.144	.146	.145	.78	.34	4.1	5.1	5.5	4.3	5.2
December.....	29.02	29.51	28.53	20.3	23.0	22.3	26.5	15.2	20.8	41	2	17	18	18	87	80	82	.102	.104	.103	.93	.49	3.6	7.2	6.5	8.2	7.5
Year.....	28.96	29.59	28.09	40.8	49.2	49.0	53.9	37.5	45.7	98	-9	35	36	37	81	63	66	.261	.268	.271	26.92	3.04	28.6	5.7	6.1	5.3	5.9

MARQUETTE, MICH.

[$\phi=46^{\circ}34'$ N.; $\lambda=87^{\circ}24'$ W.]

January.....	29.23	29.87	28.30	13.4	19.6	17.8	24.9	7.2	16.0	36	-4	10	16	14	85	82	84	0.072	0.089	0.086	2.41	0.67	23.9	7.3	7.3	6.0	7.2	
February.....	29.06	29.80	28.28	17.8	23.2	21.7	27.6	14.0	20.8	47	-2	15	18	18	89	82	85	.092	.104	.101	3.04	1.28	26.7	7.6	8.0	6.9	7.1	
March.....	29.29	29.66	28.71	19.3	25.6	24.9	29.7	16.4	23.0	47	1	16	20	19	86	77	78	.090	.107	.105	.44	.17	4.7	6.4	5.7	6.1	5.7	
April.....	29.16	29.49	28.70	35.3	39.7	38.1	43.6	32.0	37.8	66	24	31	32	32	84	76	79	.177	.190	.186	2.04	.72	13.9	6.9	7.3	6.9	6.8	
May.....	29.20	29.57	28.67	48.9	56.1	53.5	61.8	41.7	51.8	92	30	44	48	45	83	76	74	.299	.357	.314	2.18	.60	T	6.2	5.6	5.6	5.4	
June.....	29.13	29.45	28.73	59.0	64.5	63.9	70.8	52.0	61.4	96	39	50	51	51	76	64	65	.375	.383	.379	.66	.42	.0	5.9	5.1	5.8	5.2	
July.....	29.15	29.42	28.73	65.1	70.8	68.5	76.3	58.1	67.2	96	47	57	57	56	76	64	66	.471	.482	.461	5.03	1.56	.0	3.3	5.1	4.9	5.5	
August.....	29.21	29.56	28.92	65.4	76.8	72.3	80.8	59.8	70.3	94	41	56	59	60	73	56	67	.460	.510	.527	1.13	.59	.0	4.9	6.0	5.3	5.3	
September.....	29.23	29.58	28.63	53.9	62.4	57.9	65.3	47.9	56.6	91	39	47	49	48	78	64	72	.342	.376	.358	3.36	.98	.0	6.9	6.9	5.8	6.2	
October.....	29.17	29.74	28.80	40.5	46.6	43.9	49.5	37.4	43.4	73	28	35	37	37	81	70	78	.213	.228	.232	4.42	2.30	.0	4.5	7.6	8.5	8.0	8.0
November.....	29.13	29.71	28.22	30.3	35.3	38.1	38.5	27.5	33.0	54	8	27	27	28	87	72	81	.152	.153	.159	4.25	1.05	16.0	8.5	7.5	6.9	7.4	
December.....	29.22	29.85	28.58	19.7	22.3	21.0	26.6	15.4	21.0	37	5	17	19	18	88	85	86	.094	.102	.098	2.31	.55	27.0	8.6	9.0	8.4	8.7	
Year.....	29.18	29.87	28.08	39.0	45.3	43.0	49.6	34.1	41.9	96	-4	34	36	36	82	72	76	.236	.257	.250	31.27	2.30	116.7	6.7	6.8	6.4	6.5	

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

LYNCHBURG, VA.

[H=631 ft.; H_b=686 ft.; h_i=144 ft.; h_r=142 ft.; h_a=184 ft.]

Month	Wind														Number of days														
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from									Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temp.	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
																		0.01 inch or over	0.04 inch or over										
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm				0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light						
Mi.		Mi.																											
January	7.5	SW.	24	SW.	0	10	11	10	2	3	13	9	4	0	1	6	24	19	18	0	0	0	22	7	0	0	4	0	0
February	8.6	NW.	32	NW.	1	4	2	7	1	9	8	6	19	0	10	4	14	11	8	8	4	0	6	2	0	0	14	1	1
March	9.3	NW.	32	NW.	1	6	5	2	2	6	7	7	27	0	16	9	6	6	2	1	0	4	1	0	0	0	14	1	0
April	8.8	NW.	26	NW.	0	4	7	6	2	10	9	8	14	0	11	9	10	11	10	1	0	3	0	0	1	1	2	0	0
May	6.7	NW.	25	NW.	0	8	2	8	5	10	7	11	11	0	14	13	4	10	7	0	0	0	0	0	2	0	7	0	0
June	6.4	SW.	37	NW.	3	12	1	6	3	12	10	10	6	0	3	22	5	16	13	0	0	2	2	0	0	8	0	15	0
July	5.9	NW.	36	NW.	1	14	3	7	1	7	7	11	12	0	7	15	9	12	12	0	0	0	9	4	0	10	0	12	0
August	5.4	W.	30	N.	0	10	6	7	3	13	7	12	2	2	11	10	10	18	15	0	0	0	20	1	0	10	0	13	0
September	5.2	NW.	28	NW.	0	12	6	8	4	7	4	5	11	3	15	8	7	5	5	0	0	0	17	3	0	3	0	1	0
October	7.0	NW.	25	SW.	0	5	5	9	6	6	10	10	11	0	9	9	13	14	11	0	0	0	17	2	0	0	3	0	0
November	7.9	NW.	25	SW.	0	2	4	2	0	7	15	15	15	0	15	7	8	7	4	0	0	0	9	1	0	0	10	0	0
December	6.8	SW.	26	NW.	0	9	3	6	0	8	9	13	14	0	9	10	12	7	4	4	1	0	10	2	3	0	20	0	0
Year	7.1	NW.	37	NW.	6	96	55	78	29	98	106	117	146	5	121	122	122	136	113	15	6	2	119	28	3	34	66	51	1

MACON, GA.

[H=330 ft.; H_b=370 ft.; h_i=78 ft.; h_r=73 ft.; h_a=87 ft.]

January	7.2	S.	21	NE.	0	10	13	13	4	13	1	1	5	2	1	6	24	18	13	0	0	0	0	0					
February	8.2	NW.	30	NW.	0	9	1	8	1	10	5	2	18	2	10	7	11	10	10	0	0	5	0	0					
March	6.9	NW.	21	NW.	0	8	2	2	1	10	6	7	24	2	12	10	9	9	7	0	0	7	1	0					
April	6.3	S.	25	NE.	0	9	1	6	5	14	9	5	9	2	15	7	8	10	8	0	0	0	0	0					
May	6.1	N.	21	NW.	0	19	4	6	3	14	5	0	11	0	15	12	4	5	5	0	0	2	0	0					
June	6.4	S.	24	N.	0	10	1	6	3	13	10	12	5	0	4	19	7	11	8	0	0	0	2	0					
July	6.1	SW.	22	NW.	0	5	3	4	6	13	16	7	6	2	5	19	7	14	8	0	0	0	4	0					
August	5.7	S.	29	NW.	0	12	5	8	10	15	8	2	1	1	5	14	12	12	8	0	0	0	7	1					
September	6.2	E.	18	E.	0	6	12	17	8	7	3	3	1	3	11	7	12	7	4	0	0	0	7	1					
October	7.8	NW.	21	NW.	0	6	13	8	4	10	6	4	10	1	11	9	11	12	9	0	0	0	7	1					
November	7.2	NW.	21	NW.	0	14	13	1	2	3	0	5	20	2	13	7	10	9	5	0	0	0	6	1					
December	6.2	NW.	21	NW.	0	13	7	3	2	5	5	2	23	2	11	9	11	5	5	1	1	0	10	0					
Year	6.7	NW.	30	NW.	0	121	75	82	49	127	74	50	133	19	113	126	126	122	90	1	1	0	84	11	0	63	26	67	0

MADISON, WIS.

[H=938 ft.; H_b=974 ft.; h_i=70 ft.; h_r=62 ft.; h_a=78 ft.]

January	9.4	W.	25	SW.	0	6	2	4	6	7	15	17	5	0	9	8	14	9	7	12	5	0	13	5	0	0	0	0	0	
February	10.1	W.	27	NW.	0	3	2	0	8	9	4	18	12	0	9	5	14	13	6	17	10	0	13	2	19	0	25	2	3	
March	8.6	NW.	39	N.	2	12	6	2	2	5	6	4	8	20	1	10	7	14	10	7	17	8	0	10	3	9	0	30	0	3
April	9.5	SE.	32	N.	1	8	6	9	13	5	4	4	10	1	6	3	21	16	9	3	0	0	16	2	0	0	7	3	2	2
May	7.7	S.	26	S.	0	7	9	5	8	11	2	8	8	4	5	14	12	10	7	0	0	0	10	3	0	0	0	4	4	4
June	7.3	N.	26	SW.	0	12	6	1	9	11	8	3	10	0	3	14	13	12	12	0	0	0	10	0	0	0	2	0	9	2
July	6.1	SW.	22	NW.	0	6	3	4	3	8	19	6	8	5	17	8	6	5	2	0	0	0	3	1	0	5	0	6	0	0
August	6.6	S.	19	S.	0	6	3	0	9	28	8	1	6	1	12	10	9	5	5	0	0	0	9	0	0	8	0	5	8	8
September	8.2	S.	33	S.	1	4	6	2	6	22	8	4	8	0	12	12	6	8	7	0	0	1	7	0	0	3	0	5	2	2
October	8.3	SE.	26	NW.	0	8	4	4	9	7	9	9	12	0	9	7	15	8	6	4	1	0	12	4	0	0	5	0	7	7
November	10.6	NW.	26	W.	0	0	9	1	5	10	12	13	18	0	11	11	8	8	6	9	4	1	5	1	10	0	21	4	2	2
December	8.6	W.	21	W.	0	4	6	3	6	8	8	15	12	0	4	7	20	10	6	14	6	0	20	4	22	0	31	0	3	3
Year	8.4	NW.	39	N.	4	76	54	35	84	131	103	106	129	12	107	106	152	114	80	76	34	2	128	25	81	18	150	38	36	36

MARQUETTE, MICH.

[H=677 ft.; H_b=734 ft.; h_i=44 ft.; h_r=42 ft.; h_a=69 ft.]

January	11.0	W.	42	SW.	2	0	2	4	7	12	4	26	6	1	7	5	19	15	11	18	15	0	2	0	26	0	31	0	0	0
February	10.5	W.	29	SW.	0	5	0	4	7	8	7	15	10	0	4	8	16	15	13	19	14	0	0	0	20	0	28	0	0	0
March	9.5	NW.	23	NW.	0	5	5	2	0	6	2	17	23	2	10	9	12	10	5	18	10	0	0	1	18	0	31	0	0	0
April	9.4	NW.	32	SE.	1	10	3	7	8	5	0	8	18	1	6	9	15	13	10	9	7	0	3	2	1	0	17	0	0	0
May	8.4	NW.	26	SW.	0	9	1	2	9	8	4	6	20	3	9	12	10	13	8	2	0	0	4	2	0	1	3	2	0	0
June	7.6	S.	29	S.	0	2	1	3	14	14	6	5	13	2	7	16	7	9	4	0	0	0	2	3	0	1	0	4	0	0
July	7.1	NW.	26	SW.	0	3	2	6	11	7	6	6	14	7	10	12	9	12	9	0	0	1	7	5	0	2	0	10	0	0
August	7.8	S.	26	SW.	0	3	2	2	8	14	11	6	13	3	8	18	5	8	5	0	0	0	3	2	0	7	0	5	0	0
September	8.2	NW.	32	SW.	1	5	1	2	4	12	10	8	14	4	4	13	13	14	11	0	0	0	1	2	0	1	0	5	0	0
October	8.4	NW.	24	NW.	0	3	1	4	5	11	5	12	20	1	4	5	22	16	14	8	6	0	1	0	0	0	10	0	1	0
November	9.3	NW.	26	SW.	0	2	4	1	2	12	11	11	17	0	5	6	19	13	12	13	10	0	2	1	10	0	23	0	0	0
December	8.0	NW.	30	SW.	0	4	3	2	4	9	13	11	14	2	1	5	25	19	10	23	19	0	0	0	22	0	31	0	0	0
Year	8.7	NW.	42	SW.	4	51	25	39	79	118	79	131	182	26	75	118	172	157	112	110	81	1	25	18	97	12	174	26	1	1

TABLE 15.—Annual meteorological summaries for the year ended Dec., 31, 1937—Continued

MEDFORD, OREG.																											
[$\phi=42^{\circ}23'$ N.; $\lambda=122^{\circ}52'$ W.]																											
Month	Pressure			Temperature								Moisture															
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation		Cloudiness							
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
January	In. 28.65	In. 29.10	In. 28.23	° 22.8	° 32.9	° 35.6	° 18.2	° 26.9	° 45	° 1	° 21	° 25	% 92	% 74	In. 0.115	In. 0.139	In. 2.10	In. 0.58	In. 9.5	6.8	6.5	7.0					
February	28.59	29.01	28.14	34.6	46.9	48.8	32.4	40.6	66	25	32	32	92	59	.183	.184	3.23	1.25	2.8	6.8	8.7	8.6					
March	28.54	28.97	27.94	39.3	56.0	58.0	37.2	47.6	75	30	36	36	89	50	.214	.217	2.48	.60	T	7.0	9.1	8.4					
April	28.65	28.96	28.32	40.2	57.5	61.0	37.7	49.4	77	30	37	36	89	48	.224	.216	2.56	.84	T	5.9	7.0	6.7					
May	28.60	28.95	28.20	45.7	71.0	73.7	43.8	58.8	87	35	42	40	86	35	.266	.252	1.63	1.17	0	5.1	4.5	5.0					
June	28.56	28.81	28.23	53.2	76.2	78.8	51.6	65.2	100	41	49	47	87	42	.352	.337	1.71	.81	0	5.7	6.7	5.9					
July	28.59	28.80	28.37	57.1	87.0	89.3	55.8	72.6	99	46	51	51	81	31	.384	.386	.30	.29	0	1.6	1.3	1.6					
August	28.60	28.85	28.40	54.3	86.1	87.5	51.6	69.6	100	41	47	45	77	25	.329	.306	.04	.04	0	.9	.9	1.5					
September	28.59	28.95	28.35	50.9	80.5	82.2	48.3	65.2	102	37	46	42	84	30	.312	.277	1.15	.82	0	3.0	2.3	2.9					
October	28.64	28.94	28.42	45.1	68.7	70.4	41.6	56.0	81	35	44	47	96	50	.291	.330	2.26	.85	0	4.2	4.6	5.1					
November	28.62	28.94	28.23	42.6	52.2	55.7	39.7	47.7	66	24	41	44	94	76	.258	.292	5.69	1.55	T	7.2	7.6	8.0					
December	28.69	29.14	27.92	37.7	44.7	46.5	34.5	40.5	61	25	36	38	94	80	.214	.232	3.49	1.49	2.0	6.0	7.5	9.1					
Year	28.61	29.14	27.92	43.6	63.3	65.6	41.0	53.3	102	1	40	40	88	50	.262	.264	26.64	1.55	14.3	5.0	5.6	5.8					

MEMPHIS, TENN.

[$\phi=35^{\circ}09'$ N.; $\lambda=90^{\circ}03'$ W.]

January	29.68	30.04	29.20	42.4	46.2	46.0	51.3	37.5	44.4	75	19	39	40	41	88	81	84	0.259	0.275	0.280	17.56	3.66	0.0	8.7	8.6	8.6	8.9
February	29.66	30.18	29.06	39.0	44.3	45.0	49.4	36.1	42.8	75	24	29	31	32	67	61	62	.172	.197	.194	1.95	.97	T	5.6	5.8	5.5	5.9
March	29.65	29.95	29.05	42.2	50.0	52.3	55.8	39.8	47.8	76	27	34	34	35	72	57	54	.202	.211	.209	1.96	.80	T	4.9	6.2	5.0	5.6
April	29.49	29.97	29.11	55.6	66.0	68.2	71.7	53.6	62.6	90	40	46	45	44	72	49	44	.336	.329	.315	3.59	1.74	0	5.3	5.3	5.8	6.1
May	29.55	29.71	29.39	66.2	76.7	76.2	81.1	64.3	72.7	95	53	58	58	58	76	55	57	.495	.493	.507	4.04	2.20	0	5.3	5.2	4.6	5.5
June	29.53	29.79	29.25	73.8	83.3	83.7	87.2	71.2	79.2	96	65	66	66	67	78	57	59	.655	.636	.673	4.07	1.68	0	5.5	5.4	5.6	5.7
July	29.58	29.76	29.44	74.2	83.3	84.6	87.4	72.2	79.8	93	64	66	66	68	77	58	59	.653	.660	.694	4.32	2.14	0	5.2	5.6	4.4	5.3
August	29.58	29.79	29.39	75.9	86.3	86.2	89.7	74.8	82.2	98	71	69	71	71	81	61	62	.715	.756	.766	1.72	.84	0	5.2	5.8	6.1	5.6
September	29.61	29.91	29.37	66.3	77.3	76.0	81.1	64.6	72.8	91	48	59	59	61	79	56	61	.534	.529	.561	2.50	1.44	0	4.6	4.2	4.8	4.7
October	29.61	30.02	29.14	55.3	65.6	64.1	68.5	53.0	60.8	87	32	48	47	48	78	53	59	.373	.361	.372	5.49	2.41	0	4.6	4.0	4.0	4.2
November	29.72	30.25	29.21	44.3	51.8	51.9	56.5	42.2	49.4	82	18	36	34	35	73	53	54	.238	.222	.230	4.18	2.39	.2	5.8	5.4	5.2	5.5
December	29.74	30.15	29.11	39.7	44.9	45.6	49.4	35.6	42.5	68	13	35	34	36	82	67	68	.233	.234	.243	3.92	1.19	1.2	7.1	7.7	5.8	7.3
Year	29.62	30.25	29.05	56.2	64.6	65.0	69.1	53.7	61.4	98	13	49	49	50	77	59	60	.405	.409	.420	55.30	3.66	1.4	5.6	5.8	5.4	5.9

MERIDIAN, MISS.

[$\phi=32^{\circ}21'$ N.; $\lambda=88^{\circ}40'$ W.]

January	29.70	29.96	29.38	54.4	60.3	59.5	65.6	49.6	57.6	80	34	52	52	52	91	76	77	0.409	0.418	0.406	18.77	3.78	0.0	9.4	8.7	6.4	9.1
February	29.69	30.14	29.27	42.4	52.6	52.7	58.1	38.7	48.4	79	25	34	34	36	73	52	55	.215	.226	.242	6.78	2.92	0.0	6.2	5.3	5.4	5.7
March	29.66	30.03	29.22	43.7	58.7	58.8	64.5	41.0	52.8	81	28	39	37	38	84	47	49	.256	.235	.248	2.61	.65	0	5.2	4.9	4.0	4.8
April	29.56	30.03	29.20	56.4	71.3	70.7	77.1	52.6	64.8	90	37	51	48	48	81	46	48	.400	.365	.433	2.72	.91	0	4.2	4.2	3.7	3.8
May	29.59	29.72	29.43	66.2	82.1	80.4	85.8	63.0	74.4	96	50	61	57	58	83	44	49	.548	.482	.495	2.01	1.19	0	3.3	4.9	3.3	4.1
June	29.58	29.78	29.29	73.8	86.8	82.9	90.6	70.0	80.3	98	66	69	67	67	85	53	62	.705	.664	.665	4.42	2.59	0	4.4	7.2	6.6	6.0
July	29.63	29.83	29.50	72.7	87.3	84.1	91.8	69.4	80.6	96	61	68	66	66	86	50	57	.691	.640	.652	2.68	.81	0	4.0	5.8	5.1	4.8
August	29.62	29.83	29.45	73.7	87.8	82.0	91.7	71.5	81.6	100	68	70	69	70	90	56	70	.743	.718	.739	3.86	.97	0	5.2	6.9	7.3	6.5
September	29.63	29.92	29.40	65.3	81.4	76.8	85.3	64.1	74.7	93	46	62	61	63	90	52	63	.589	.566	.594	1.76	.69	0	3.8	4.7	4.1	4.4
October	29.63	29.89	29.32	54.6	69.9	65.1	73.7	52.5	63.1	92	31	51	52	53	89	56	66	.409	.426	.443	5.18	3.16	0	4.7	5.6	3.1	4.8
November	29.72	30.20	29.25	44.5	57.4	53.3	61.5	41.8	51.6	79	22	40	39	40	84	54	63	.275	.270	.280	4.25	2.24	0	6.0	5.5	4.1	5.3
December	29.77	30.05	29.23	42.5	52.5	50.2	55.8	39.9	47.8	72	15	38	39	40	84	62	69	.258	.276	.285	2.98	.79	0	6.2	6.6	5.4	6.7
Year	29.65	30.20	29.20	57.5	70.7	68.0	75.1	54.5	64.8	100	15	53	52	53	85	54	61	.458	.440	.457	58.02	3.78	0	5.2	5.9	4.9	5.5

MIAMI, FLA.

[$\phi=25^{\circ}48'$ N.; $\lambda=80^{\circ}12'$ W.]

January	30.10	30.27	29.97	73.6	77.5	74.8	78.3	72.6	75.4	82	68	66	67	68	77	70	79	0.639	0.658	0.682	1.30	0.57	0.0	4.3	5.7	3.9	4.8
February	30.02	30.19	29.79	65.9	73.3	70.3	75.2	63.6	69.4	81	49	58	59	60	76	63	71	.497	.519	.525	4.02	1.51	0.0	4.9	5.4	4.8	5.5
March	29.97	30.30	29.71	66.5	74.9	71.6	77.1	63.7	70.4	87	48	61	61	62	82	63	73	.551	.564	.573	7.06	2.26	0.0	4.9	5.6	5.5	5.4
April	29.99	30.29	29.75	71.8	78.3	74.2	79.8	68.4	74.1	86	57	62	63	63	73	60	70	.587	.594	.599	1.60	.92	0.0	5.6	6.2	6.3	6.2
May	29.94	30.09	29.82	76.1	81.2	77.5	82.6	72.1	77.4	86	66	67	66	67	74	61	70	.663	.650	.656	2.45	1.14	0.0	2.7	3.7	3.3	3.5
June	29.98	30.13	29.75	80.6	84.1	81.0	86.2	76.3	81.2	89	71	71	72	72	74	66	75	.771	.774	.790	3.83	2.17	0.0	5.3	6.4	7.5	6.4
July	30.03	30.16	29.92	81.4	85.4	82.0	87.1	76.4	81.8	90	72	73	73	73	77	68	74	.821	.820	.802	5.70	1.73	0.0	6.0	6.3	6.6	5.9
August	29.99	30.11	29.76	81.0	85.2	82.5	87.6	76.3	82.0	92	69	74	74	74	79	69	77	.826	.826	.846	8.82	4.04	0.0	4.9	6.8	7.0	6.3
September	29.92	30.08	29.73	79.0	83.8	80.9	85.7	75.7	80.7	91	69	72	72	73	80	70	77	.792	.792	.809	16.99	7.19	0.0	5.8	6.3	5.5	6.1
October	29.94	30.08	29.69	74.2	81.1	77.3	83.0	71.0	77.0	89	53	67	67	68	79	64	74	.699	.690	.713	5.00	1.96	0.0	3.5	3.6	4.9	4.0
November	29.97	30.27	29.55	68.0	75.2	71.7	76.6	65.3	71.0	82	43	60	60	61	78	62	70	.545	.548	.560	.33	.19	0.0	5.8	5.7	3.8	4.9
December	30.07	30.24	29.69	63.5	71.3	68.2	73.3	60.6	67.0	79	40	57	59	58	80	66	71	.486	.518	.506	.40	.14	0.0	4.7	5.2	4.1	5.2
Year	29.99	30.30	29.55	73.5	79.3	76.0	81.0	70.2	75.6	92	40	66	66	67	77	65	73	.656	.663	.672	57.50	7.19	0.0	4.9	5.6	5.3	5.4

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

MEDFORD, OREG.

[H=1,314 ft.; H_b=1,329 ft.; h_i=29 ft.; h_r=26 ft.; h_a=58 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m. and 7:30 p. m., winds observed from											Precipitation	Snow				Fog	Maximum temp.		32°	Elec- tricity			
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
	Mi.	N.	Mi.																										
January		N.				20	11	6	5	6	3	6	4	1	7	5	19	14	13	19	11	0	14	10	8	0	30	0	0
February		NW.				9	8	3	6	6	4	9	9	2	1	5	22	13	10	11	4	0	9	5	0	0	15	0	0
March		NW.				9	7	2	10	8	6	5	16	0	1	8	22	14	12	3	0	0	4	2	0	0	4	0	0
April		NW.				6	7	2	5	2	7	12	18	1	4	12	14	13	9	1	0	1	2	1	0	0	3	0	0
May		W.				6	3	3	5	2	7	16	16	4	12	9	10	7	3	0	0	0	0	0	0	0	0	0	0
June		W.				6	4	1	3	4	5	18	16	3	10	5	15	13	7	0	0	0	0	0	0	8	0	5	0
July		W.				7	1	2	12	2	4	20	17	7	24	7	0	2	1	0	0	0	0	0	16	0	3	0	0
August		NW.				6	0	1	2	5	10	9	23	6	25	5	1	2	0	0	0	0	0	0	15	0	0	1	0
September		NW.				3	2	4	8	6	8	10	15	4	17	9	4	3	3	0	0	0	2	2	0	8	0	1	0
October		S.				7	2	4	6	15	8	12	6	2	11	10	10	8	6	0	0	0	14	5	0	0	0	1	0
November		NW.				6	12	7	6	7	8	3	6	5	3	6	21	18	13	2	0	0	17	9	0	0	2	0	0
December		NW.				9	4	3	9	7	4	10	10	6	0	4	27	9	7	5	2	0	21	16	0	0	15	0	0
Year		NW.				93	61	38	67	70	74	130	156	41	115	85	165	116	84	41	17	1	83	50	8	47	69	10	1

MEMPHIS, TENN.

[H=270 ft.; H_b=399 ft.; h_i=78 ft.; h_r=70 ft.; h_a=86 ft.]

January	8.5	N.	34	NW.	1	17	8	15	4	11	2	3	2	0	1	3	27	20	18	0	0	0	4	1	1	0	11	5	0	
February	10.2	N.	37	NW.	2	14	6	8	2	11	4	5	6	0	7	9	12	8	7	5	0	0	2	1	0	0	11	2	0	
March	9.2	N.	24	W.	0	12	11	9	2	7	8	1	12	0	9	9	13	9	5	2	1	0	2	0	0	0	7	0	0	
April	9.2	SW.	27	SW.	0	4	2	11	4	14	9	8	6	2	7	12	11	9	6	0	0	0	0	0	0	0	8	0	0	
May	6.9	SW.	23	SW.	0	7	7	9	2	9	20	3	2	3	7	16	8	13	8	0	0	2	0	0	0	5	0	7	0	
June	6.7	SW.	40	SW.	3	5	7	7	4	11	18	4	4	0	9	10	11	10	7	0	0	0	0	0	10	0	10	0	0	
July	6.7	SW.	41	NW.	1	9	7	8	7	9	15	3	4	0	9	13	9	6	5	0	0	0	0	0	9	0	8	0	0	
August	6.7	SW.	21	NE.	0	4	9	16	7	13	12	1	0	0	10	10	11	10	8	0	0	0	0	0	19	0	9	0	0	
September	6.6	E.	18	N.	0	14	12	12	6	8	6	1	1	0	16	3	11	6	5	0	0	0	0	0	1	0	1	0	0	
October	7.8	E.	24	SW.	0	9	8	13	3	11	9	4	4	1	18	3	10	12	7	0	0	0	0	0	0	1	1	0	0	
November	7.8	E.	27	W.	0	7	12	8	7	5	9	4	8	0	14	2	14	11	8	3	1	0	4	0	0	0	9	0	0	
December	7.4	E.	20	N.	0	8	6	9	5	12	9	4	9	0	5	7	19	13	12	3	1	0	6	1	3	0	10	2	0	
Year	7.8	SW.	41	NW.	7	110	95	125	53	121	121	41	58	6	112	97	156	127	96	13	3	2	18	3	4	44	49	53	0	0

MERIDIAN, MISS.

[H=343 ft.; H_b=375 ft.; h_i=67 ft.; h_r=60 ft.; h_a=92 ft.]

January	8.0	S.	22	S.W.	0	8	8	13	7	17	1	2	6	0	0	3	28	20	16	0	0	0	13	5	0	0	1	0	0
February	7.7	N.	24	N.W.	0	18	7	4	6	8	4	4	4	1	10	5	13	10	10	0	0	0	3	0	0	0	8	3	0
March	6.6	N.	21	S.W.	0	21	9	3	2	7	7	3	5	5	14	5	12	11	8	0	0	0	4	0	0	0	6	2	0
April	7.0	N.W.	29	SE	0	5	4	7	12	5	15	4	7	1	15	8	7	7	7	0	0	0	3	0	0	1	0	6	0
May	4.9	S.W.	24	N.	0	5	8	5	8	8	11	8	3	6	15	12	4	9	7	0	0	0	1	0	0	10	0	8	0
June	5.3	S.W.	20	SE.	0	3	2	4	2	15	21	4	4	5	7	12	11	12	7	0	0	0	2	0	0	19	0	12	0
July	5.2	S.W.	21	N.	0	7	5	7	4	9	17	4	3	6	14	9	8	10	7	0	0	0	4	0	0	24	0	13	0
August	4.9	E.	27	SE.	0	4	5	15	4	8	14	7	1	4	5	12	14	15	14	0	0	0	2	0	0	21	0	12	0
September	5.1	N.E.	18	S.W.	0	9	18	7	5	6	4	2	2	7	13	7	10	8	7	0	0	0	4	0	0	7	0	6	0
October	6.3	N.E.	20	SE.	0	7	10	12	4	3	7	6	5	8	13	8	10	10	9	0	0	0	1	1	0	1	1	1	0
November	6.0	N.E.	20	W.	0	8	16	14	5	2	2	3	6	4	12	5	13	7	7	0	0	0	3	0	0	0	8	0	0
December	5.4	N.	20	S.W.	0	13	7	15	4	11	3	4	2	3	8	6	17	13	12	0	0	0	6	1	1	0	11	0	0
Year	6.0	S.W.	29	SE.	0	108	99	106	63	99	106	51	48	50	126	92	147	132	111	0	0	0	46	7	1	83	34	64	0

MIAMI, FLA.

[H=11 ft.; H_b=25 ft.; h_i=124 ft.; h_r=117 ft.; h_a=168 ft.]

January	11.8	E.	24	E.	0	0	8	34	18	1	1	0	0	0	9	15	4	10	6	0	0	0	0	0	0	0	0	2	0
February	11.4	SE.	33	W.	1	7	5	9	14	4	6	3	8	0	8	11	9	10	8	0	0	0	0	0	0	0	0	3	0
March	10.2	SE.	37	S.W.	1	16	6	8	9	10	3	5	5	0	11	11	9	12	9	0	0	0	1	0	0	0	0	5	0
April	10.6	SE.	31	S.W.	0	8	6	8	22	7	3	1	5	0	4	14	12	9	6	0	0	0	0	0	0	0	0	7	0
May	9.0	N.E.	22	S.	0	8	21	14	9	0	4	1	5	0	20	7	4	10	8	0	0	0	0	0	0	0	0	14	0
June	8.8	SE.	29	S.	0	5	6	9	24	1	8	4	3	0	5	15	10	14	11	0	0	0	0	0	0	0	0	7	0
July	8.3	SE.	40	S.	1	8	8	16	19	6	0	2	3	0	7	12	12	17	13	0	0	0	0	0	0	1	0	15	0
August	8.1	E.	29	S.	0	6	16	17	14	3	1	1	4	0	7	14	10	20	15	0	0	0	0	0	0	3	0	20	0
September	8.7	SE.	29	E.	0	6	21	7	14	4	3	1	4	0	5	13	12	15	12	0	0	0	0	0	0	1	0	12	0
October	8.9	SE.	25	W.	0	14	12	13	9	5	3	2	4	0	15	10	6	15	11	0	0	0	0	0	0	0	0	6	0
November	12.3	N.E.	29	N.E.	0	10	21	4	5	6	2	1	11	0	9	14	7	8	1	0	0	0	1	0	0	0	0	1	0
December	9.9	N.	24	W.	0	13	11	10	5	7	1	0	15	0	10	11	10	8	4	0	0	0	3	1	0	0	0	0	0
Year	9.8	SE.	40	S.	3	101	141	149	162	54	35	21	67	0	110	150	105	148	104	0	0	0	8	2	0	5	0	90	0</

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

MILES CITY, MONT.

[$\phi=46^{\circ} 25' N.$; $\lambda=105^{\circ} 49' W.$]

Month	Pressure			Temperature									Moisture														
	Extremes			Mean						Extremes		Dew point	Relative humidity		Vapor pressure			Precipitation			Cloudiness						
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>				
January	27.49	27.96	26.81	-5.6	1.0	1.5	8.1	-11.7	-1.8	37	-31	-16	-7	-6	58	66	67	0.024	0.031	0.035	0.38	0.15	5.4	5.6	5.9	5.1	5.5
February	27.42	27.86	26.89	8.4	19.0	21.3	24.8	4.1	14.4	41	-31	1	10	12	71	66	68	.051	.071	.082	.23	.07	3.2	5.0	6.1	5.4	5.8
March	27.56	27.90	27.02	24.2	36.3	39.3	42.0	21.5	31.8	65	-7	20	24	24	81	61	56	.110	.131	.133	.66	.45	7.0	4.7	5.8	6.5	5.9
April	27.38	27.78	26.90	37.8	53.0	53.7	57.0	36.3	46.6	81	26	27	26	25	65	38	38	.145	.138	.140	.79	.23	.8	5.3	5.7	6.5	5.7
May	27.43	27.94	26.85	50.8	67.2	70.5	72.2	48.5	60.4	94	37	38	36	34	64	34	28	.233	.213	.196	.81	.33	.0	4.9	5.4	5.9	5.5
June	27.43	27.71	27.05	57.9	74.2	76.3	78.5	55.6	67.0	98	40	47	43	41	69	35	32	.336	.288	.274	2.00	1.11	.0	5.8	6.0	5.3	5.5
July	27.44	27.70	27.12	66.4	83.8	86.1	89.2	64.2	76.7	107	54	55	52	50	68	36	32	.440	.397	.367	1.76	.96	.0	4.4	4.3	5.6	4.6
August	27.41	27.77	27.10	62.2	83.9	87.0	90.2	59.9	75.0	104	49	42	42	41	50	25	23	.278	.280	.268	1.33	1.26	.0	3.2	3.0	4.2	3.3
September	27.49	27.92	27.14	53.1	70.8	73.8	76.0	50.5	63.2	99	33	43	44	42	71	42	37	.294	.303	.281	.77	.40	T	5.1	4.3	4.7	4.5
October	27.49	27.89	27.02	42.2	58.5	58.0	62.6	39.7	51.2	82	29	35	36	35	76	46	45	.205	.218	.209	1.00	.85	T	4.4	4.6	5.5	4.8
November	27.52	27.99	26.90	27.8	36.6	36.0	41.2	23.0	32.1	67	7	21	23	23	76	59	62	.114	.124	.125	.27	.10	4.3	7.2	6.9	6.9	7.1
December	27.52	28.14	26.96	15.3	22.8	22.9	29.7	7.8	18.8	45	-18	10	15	16	78	68	73	.079	.094	.097	.42	.25	5.0	5.3	6.6	6.7	6.8
Year	27.46	28.14	26.81	36.7	50.6	52.2	56.0	33.3	44.6	107	-31	27	29	28	69	48	47	.192	.191	.184	10.42	1.26	25.7	5.1	5.4	5.6	5.4

MILWAUKEE, WIS.

[$\phi=43^{\circ} 02' N.$; $\lambda=87^{\circ} 54' W.$]

January.....	29.35	29.87	28.53	19.8	24.2	25.0	31.2	15.0	23.1	44	-1	14	16	18	77	70	74	0.091	0.101	0.107	3.12	1.00	0.7	6.1
February.....	29.19	29.89	28.34	22.1	26.5	24.9	31.8	16.1	24.0	49	-2	18	18	18	81	67	73	.110	.106	.103	1.72	1.22	1.9	5.4
March.....	29.34	29.68	28.88	27.9	32.9	32.8	37.0	25.3	31.2	51	9	22	21	22	76	61	64	.118	.118	.124	1.74	.75	13.2	6.0
April.....	29.17	29.60	28.56	39.4	45.2	43.7	48.7	36.7	42.7	70	29	33	34	34	78	67	71	.191	.199	.199	4.80	1.98	T	7.1
May.....	29.25	29.52	28.89	52.1	58.1	58.4	63.9	47.4	55.6	89	38	43	44	43	72	60	60	.289	.299	.299	2.70	1.12	.0	5.4
June.....	29.22	29.59	28.89	61.0	65.4	66.2	71.8	55.9	63.8	97	46	51	52	51	71	64	60	.391	.405	.395	2.64	1.06	.0	5.7
July.....	29.23	29.42	28.89	69.3	77.6	76.7	81.9	65.1	73.5	97	56	59	60	58	71	57	56	.517	.533	.504	3.06	1.26	.0	3.8
August.....	29.30	29.52	29.02	70.5	78.0	76.7	82.0	67.6	74.8	98	58	63	62	63	77	61	64	.573	.573	.579	.80	.43	.0	4.0
September.....	29.32	29.62	28.84	58.3	68.8	66.2	72.5	55.1	63.8	94	42	48	49	50	69	52	58	.358	.382	.391	1.14	.44	.0	3.7
October.....	29.27	29.76	28.21	45.2	51.6	50.7	55.5	42.2	48.8	81	26	38	39	38	76	63	64	.249	.256	.252	1.83	1.00	T	5.9
November.....	29.28	29.84	28.58	32.1	38.7	37.1	42.7	28.9	35.8	67	11	25	26	27	75	60	66	.149	.148	.156	.85	.34	2.0	5.5
December.....	29.34	29.86	28.80	23.7	27.3	26.0	30.2	19.7	25.0	44	4	19	20	20	80	71	77	.109	.111	.113	1.42	.70	4.5	6.2
Year.....	29.27	29.89	28.21	43.4	49.5	48.7	54.1	39.6	46.8	98	-2	36	37	37	75	63	66	.262	.269	.263	25.82	1.98	22.3	5.4

MINNEAPOLIS, MINN.

[$\phi=44^{\circ} 59' N.$; $\lambda=93^{\circ} 18' W.$]

January.....	29.06	29.54	28.18	3.4	8.5	7.6	15.5	-4.6	5.4	35	-18	1	2	4	89	74	81	0.048	0.052	0.054	1.24	0.40	12.2	4.8
February.....	28.93	29.63	28.27	9.4	17.1	17.6	21.7	5.2	13.4	45	-15	6	9	12	85	70	76	.062	.070	.079	.48	.22	7.6	5.8
March.....	29.12	29.48	28.68	21.9	31.4	31.1	34.4	19.5	27.0	56	0	17	18	21	80	55	64	.096	.101	.115	1.07	.60	8.2	4.1
April.....	28.88	29.29	28.19	38.9	48.1	49.0	52.0	37.0	44.5	67	25	32	32	34	76	56	59	.185	.189	.204	2.62	.67	3.6	6.8
May.....	28.96	29.26	28.46	53.6	65.6	66.7	69.6	50.0	59.8	90	36	44	43	44	72	47	48	.310	.301	.316	5.42	1.27	.0	5.1
June.....	28.94	29.28	28.38	62.2	72.1	72.2	76.1	58.3	67.2	99	43	52	51	51	71	51	51	.407	.401	.403	3.11	1.29	.0	5.4
July.....	28.94	29.16	28.61	69.4	83.5	84.4	87.5	66.6	77.0	100	52	58	57	58	68	41	42	.494	.479	.495	.48	.26	.0	3.4
August.....	28.98	29.35	28.71	70.8	83.1	84.4	87.3	68.1	77.7	97	55	62	62	62	74	50	48	.558	.565	.560	4.10	1.60	.0	5.4
September.....	29.02	29.35	28.58	55.9	70.1	67.8	73.8	53.2	63.5	97	37	47	46	46	74	44	48	.344	.334	.341	1.67	1.06	.0	5.2
October.....	29.00	29.58	28.49	41.5	50.8	50.2	54.2	39.2	46.7	80	24	34	34	34	75	54	54	.213	.212	.211	1.36	.73	T	6.0
November.....	29.01	29.56	28.34	27.4	34.9	34.1	39.2	24.6	31.9	63	5	21	22	22	76	58	61	.118	.124	.125	.51	.21	1.2	6.8
December.....	29.07	29.56	28.51	15.7	20.4	19.5	25.0	10.8	17.9	43	-4	12	13	14	82	72	76	.079	.086	.086	.53	.21	5.4	6.2
Year.....	28.99	29.63	28.18	39.2	48.8	48.7	53.0	35.7	44.3	100	-18	32	32	34	77	56	59	.243	.243	.249	22.59	1.60	38.2	5.4

MISSOULA, MONT.

[$\phi=46^{\circ} 52' N.$; $\lambda=114^{\circ} 00' W.$]

January	26.63	27.00	26.11	1.3	7.4		12.4	-3.3	4.6	33	-26	0	1		84	72		0.041	0.047		0.75	0.15	12.6	7.3	7.8		7.7
February	26.54	26.90	26.01	22.8	29.7		34.4	18.6	26.5	45	1	19	20		84	64		.105	.107		1.03	.36	18.0	8.1	8.5		7.7
March	26.65	27.05	26.18	30.3	41.6		46.6	28.1	37.4	61	19	25	26		80	54		.134	.141		.52	.19	7.2	5.8	6.9		8.2
April	26.58	26.92	25.97	35.8	49.5		54.5	34.2	44.4	82	27	30	28		78	45		.164	.154		.93	.26	.4	7.0	9.3		6.4
May	26.66	26.98	26.27	45.3	62.8		69.7	43.1	56.4	83	32	34	32		66	33		.197	.180		.97	.34	.0	5.5	5.5		5.5
June	26.68	26.92	26.22	50.4	68.0		73.8	48.1	61.0	100	36	42	42		75	41		.277	.271		1.08	.20	T	5.8	7.6		6.9
July	26.69	26.87	26.35	59.2	81.5		87.9	57.2	72.6	101	48	45	45		60	30		.301	.303		.47	.12	.0	3.4	3.3		3.6
August	26.69	26.99	26.29	53.7	74.8		81.9	51.1	66.5	93	38	39	38		60	29		.245	.235		.33	.13	.0	2.7	4.2		4.1
September	26.70	27.08	26.39	51.7	70.0		77.2	47.9	62.6	91	31	40	39		65	34		.246	.240		.57	.27	T	3.7	4.3		4.3
October	26.73	27.07	26.32	43.1	56.1		63.5	40.1	51.8	75	33	37	37		79	47		.220	.221		.68	.52	.0	3.6	5.6		5.2
November	26.67	27.01	26.16	34.5	42.2		45.3	31.5	38.4	66	20	28	29		78	60		.155	.159		.54	.28	.9	6.8	8.7		8.8
December	26.68	27.18	26.04	28.1	32.3		36.3	24.7	30.5	46	7	23	25		81	73		.129	.139		2.47	.81	7.2	8.3	9.1		9.2
Year	26.66	27.18	25.97	38.0	51.3		57.0	35.1	46.1	101	-26	30	30		74	48		.184	.183		10.34	.81	46.3	5.7	6.7		6.4

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

MILES CITY, MONT.

[H=2,351 ft.; H_b=2,371 ft.; h_r=48 ft.; h_r=41 ft.; h_a=55 ft.]

Month	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from																								
	Average hourly ve- locity	Prevaling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora	
January	Mi. 6.7	S.	30	NW.	0	6	9	0	1	23	8	6	9	0	9	14	8	9	3	14	9	0	4	0	29	0	31	0	0	
February	6.3	S.	34	NW.	1	9	8	5	2	18	2	7	5	0	5	14	9	6	3	11	5	0	3	0	17	0	28	0	0	
March	6.6	N.E.	25	NW.	0	10	10	9	10	8	2	4	2	2	6	14	11	5	4	8	3	0	2	0	7	0	27	0	1	
April	8.2	W.	31	NW.	0	9	6	7	10	9	2	8	8	1	10	8	12	6	4	3	1	1	0	0	0	0	9	0	0	
May	8.6	S.E.	41	NW.	1	11	3	11	7	10	4	9	7	0	8	15	8	8	5	0	0	0	0	0	0	1	0	1	2	
June	6.7	S.	26	N.	0	9	3	4	10	15	4	6	7	2	6	14	10	6	5	0	0	0	0	0	0	5	0	3	0	
July	6.0	S.	35	NW.	1	13	7	7	6	14	2	8	3	2	12	11	8	11	6	0	0	1	0	0	14	0	11	1	0	
August	5.9	N.E.	43	W.	2	8	9	6	7	12	5	5	4	6	20	6	5	2	2	0	0	1	0	0	16	0	4	0	0	
September	6.0	N.E.	28	NW.	0	9	9	6	4	10	4	6	8	4	13	10	7	7	5	1	0	1	0	0	0	3	0	4	0	
October	7.1	S.	25	S.E.	0	7	7	8	6	13	2	7	10	2	10	14	7	6	4	2	0	0	0	0	0	0	3	0	0	
November	6.5	S.	26	NW.	0	4	8	7	5	9	4	8	13	2	5	9	16	7	5	12	6	0	0	11	0	26	0	0	0	
December	6.6	S.	36	NW.	1	7	10	6	0	20	2	10	6	1	5	10	16	5	5	12	5	0	1	0	13	0	31	0	0	0
Year	6.8	S.	43	W.	6	102	89	76	68	161	46	84	82	22	109	139	117	78	51	65	31	4	10	0	77	39	155	26	5	0

MILWAUKEE, WIS.

[H=619 ft.; H_b=681 ft.; h_r=97 ft.; h_r=89 ft.; h_a=221 ft.]

January	14.7	W.	38	E.	6	5	2	5	4	7	8	19	12	0	10	3	18	9	7	12	3	0	8	1
February	14.6	W.	35	SE.	2	7	0	2	4	7	7	20	9	0	9	4	15	8	5	16	3	1	3	2
March	12.9	N.	34	NE.	2	18	5	3	2	5	2	12	15	0	8	8	15	8	7	14	7	0	7	1
April	13.6	N.	38	E.	4	14	7	7	10	6	3	10	3	0	5	7	18	15	11	1	0	1	11	3
May	11.5	N.	34	N.	2	17	5	8	5	10	4	7	6	0	7	14	10	15	12	0	0	0	3	1
June	11.1	N.	36	SW.	2	16	7	7	7	5	7	6	5	0	8	9	13	9	8	0	0	0	5	3
July	10.5	W.	34	N.	2	11	5	6	4	8	4	20	4	0	14	12	5	8	6	0	0	0	4	1
August	10.5	SW.	30	NW.	0	7	6	6	8	12	16	6	1	0	15	9	7	6	3	0	0	0	3	3
September	12.9	SW.	35	SW.	2	8	4	3	4	13	12	7	9	0	12	6	7	6	0	0	0	1	0	0
October	12.3	W.	40	W.	1	9	1	7	4	5	8	14	14	0	8	6	17	8	6	1	0	0	7	2
November	14.7	W.	36	W.	3	1	1	0	5	12	17	19	0	0	9	10	11	8	6	8	4	0	1	1
December	12.7	W.	27	W.	0	6	1	4	6	4	7	20	14	0	3	8	26	7	6	12	4	0	7	1
Year	12.7	W.	40	W.	26	119	44	58	63	87	90	158	111	0	108	102	155	108	83	64	21	2	60	19

MINNEAPOLIS, MINN.

[H=839 ft.; H_b=919 ft.; h_r=105 ft.; h_r=97 ft.; h_a=208 ft.]

January	11.4	W.	32	W.	1	3	2	11	3	10	2	25	6	0	12	6	13	11	5	18	10	0	14	0
February	12.8	W.	33	W.	1	5	0	6	4	8	1	19	13	0	7	8	13	6	4	18	6	0	9	0
March	10.4	NW.	35	E.	2	12	3	3	7	3	0	15	19	0	11	10	10	6	4	13	6	0	5	1
April	12.2	E.	33	E.	1	6	13	8	12	5	0	6	10	0	6	4	20	13	9	2	1	1	10	0
May	11.5	S.	31	NW.	0	12	6	7	16	7	3	4	7	0	6	12	13	12	8	0	0	2	5	0
June	9.6	SE.	30	SE.	0	9	7	4	13	7	4	9	6	1	9	7	14	9	8	0	0	1	6	0
July	9.7	S.	35	W.	1	6	1	2	11	17	5	9	11	0	16	7	8	5	2	0	0	0	0	0
August	9.8	S.	34	N.	1	9	2	3	12	16	8	6	5	1	12	11	8	9	6	0	0	0	5	0
September	10.3	S.	31	NW.	0	11	1	8	5	16	6	4	9	0	8	17	5	8	7	0	0	0	5	0
October	11.1	NW.	30	W.	0	5	1	2	12	10	1	11	20	0	10	8	13	9	6	4	1	0	12	2
November	12.2	W.	38	W.	2	9	1	1	7	9	6	14	13	0	7	10	13	7	5	12	2	0	3	0
December	11.3	NW.	30	NW.	0	13	1	5	11	7	6	10	9	0	6	7	18	11	5	17	11	0	15	0
Year	11.0	W.	38	W.	9	100	38	60	113	115	42	132	128	2	110	107	148	106	69	84	37	4	89	3

MISSOULA, MONT.

[H=3,200 ft.; H_b=3,263 ft.; h_r=80 ft.; h_r=77 ft.; h_a=91 ft.]

January	8.5	SE.	47	E.	5	0	3	7	10	3	0	1	4	3	5	4	22	17	9	25	17	0	3	2
February	7.7	W.	36	NE.	1	2	1	1	7	1	3	6	0	7	1	7	20	15	9	22	13	0	6	2
March	8.9	E.	41	NE.	3	2	4	12	6	1	1	1	0	4	8	9	14	8	4	10	4	0	1	0
April	7.3	W.	30	NW.	0	0	1	2	6	3	2	8	2	6	2	0	28	16	7	14	5	1	0	0
May	8.5	NW.	32	SW.	2	2	1	7	10	2	3	4	0	2	9	8	14	7	5	0	0	0	0	0
June	7.5	E.	31	NW.	0	0	4	9	8	3	0	2	1	3	4	10	16	13	9	1	0	4	0	0
July	7.3	NW.	29	E.	0	0	0	9	15	2	3	1	0	1	13	13	5	6	5	0	0	0	0	0
August	7.0	NW.	31	NW.	0	0	1	8	15	4	0	0	0	3	16	12	3	6	3	0	0	0	0	0
September	6.6	E.	35	S.	1	0	0	10	7	3	0	6	2	2	15	6	9	9	6	2	0	0	0	0
October	5.7	SE.	31	E.	0	1	2	8	8	3	3	2	3	1	12	7	12	6	2	0	0	2	0	0
November	7.4	E.	30	E.	0	1	2	9	3	5	4	4	2	0	1	6	23	10	4	8	3	0	1	1
December	7.6	W.	32	E.	1	1	1	6	6	2	7	3	5	0	1	29	15	8	18	10	0	4	1	7
Year	7.5	SE.	47	E.	13	9	20	88	101	32	26	38	19	32	87	83	195	128	71	100	52	5	17	6

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

MOBILE, ALA.																											
[$\phi=30^{\circ}42'$ N.; $\lambda=88^{\circ}02'$ W.]																											
Month	Pressure			Temperature								Moisture															
	Monthly mean	Extremes		Mean					Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation		Cloudiness								
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
January	30.04	30.28	29.81	59.9	66.1	63.7	69.0	56.9	63.0	78	45	57	58	59	91	77	84	0.488	0.503	0.519	4.03	1.64	0.0	8.4	8.8	7.7	8.8
February	30.03	30.49	29.67	47.8	57.1	56.1	61.9	44.2	53.0	74	31	40	40	42	76	56	62	.275	.287	.296	3.29	1.11	.0	6.5	6.4	6.8	6.6
March	30.00	30.41	29.66	48.3	62.4	60.9	67.1	45.9	56.5	79	32	44	43	47	86	52	62	.315	.308	.352	6.96	2.58	.0	5.1	5.2	5.2	5.6
April	29.92	30.35	29.53	60.9	72.2	69.4	76.4	57.7	67.0	86	44	57	54	56	87	56	66	.496	.459	.484	7.49	2.82	.0	4.6	4.4	3.8	4.5
May	29.93	30.06	29.77	69.5	81.3	79.4	85.1	67.3	76.2	96	57	65	63	65	86	55	63	.619	.549	.627	4.62	3.06	.0	3.2	3.9	4.0	4.2
June	29.92	30.13	29.61	76.1	85.4	82.9	88.8	72.5	80.6	95	68	71	69	70	84	61	68	.763	.722	.750	7.21	2.80	.0	5.4	7.2	7.1	6.8
July	29.97	30.14	29.84	76.4	87.5	84.1	90.6	73.2	81.9	94	67	71	69	70	84	55	65	.762	.718	.747	7.27	4.02	.0	5.0	5.9	5.6	5.7
August	29.95	30.15	29.75	76.5	86.2	81.9	89.4	74.6	82.0	96	71	73	72	73	90	64	76	.820	.782	.818	4.45	1.44	.0	5.7	7.0	7.3	6.9
September	29.94	30.20	29.68	70.5	82.2	78.1	84.6	68.8	76.7	93	54	67	66	67	88	58	71	.671	.645	.696	3.16	1.73	.0	4.9	5.2	5.1	5.5
October	29.95	30.17	29.68	60.4	72.4	68.9	75.5	58.1	66.8	91	37	56	57	59	88	62	73	.495	.514	.542	11.43	8.37	.0	4.7	3.9	3.1	5.0
November	30.04	30.51	29.50	49.9	60.3	57.3	63.9	46.6	55.2	79	26	45	43	46	83	57	67	.332	.321	.342	2.23	1.10	.0	5.8	6.0	3.8	5.5
December	30.12	30.36	29.63	46.0	56.6	54.1	60.0	43.5	51.8	72	22	42	43	44	84	62	70	.293	.314	.323	3.28	1.18	.0	4.7	6.1	4.1	6.3
Year	29.98	30.51	29.50	61.8	72.5	69.7	76.0	59.1	67.6	96	22	57	56	58	86	60	69	.528	.510	.541	65.42	8.37	.0	5.3	5.8	5.3	6.0

MODENA, UTAH																											
[$\phi=37^{\circ}48'$ N.; $\lambda=113^{\circ}54'$ W.]																											
January	24.48	24.80	24.04	2.2	17.0	14.6	20.0	-4.8	7.6	35	-32	0	12	10	92	80	80	0.051	0.078	0.071	1.14	0.64	23.5	3.4	4.3	5.0	4.2
February	24.58	24.95	23.89	22.1	37.2	37.6	41.2	18.0	29.6	58	-9	17	24	23	80	59	56	.098	.129	.123	.36	.16	3.1	4.1	5.2	5.4	5.0
March	24.54	24.95	24.12	28.9	46.0	47.5	51.2	26.5	38.8	64	10	25	27	26	84	50	49	.132	.146	.144	2.56	.71	15.8	4.5	5.8	5.2	5.6
April	24.54	24.81	24.08	33.0	54.6	55.9	60.2	29.1	44.6	76	20	21	22	22	61	32	30	.111	.122	.125	.29	.16	7	3.6	5.4	5.7	5.1
May	24.54	24.83	24.14	42.9	71.1	72.6	75.9	40.5	58.2	87	28	27	27	26	53	21	19	.145	.148	.139	.64	.61	T	4.2	4.4	5.1	4.2
June	24.60	24.72	24.42	48.9	75.7	77.2	80.6	47.0	63.8	95	36	31	31	30	52	20	20	.179	.177	.175	.10	.10	T	2.5	3.8	4.0	3.4
July	24.67	24.82	24.55	58.1	83.3	81.8	87.8	56.6	72.2	97	50	46	49	45	67	34	33	.324	.361	.315	2.49	.45	.0	3.6	3.9	5.7	4.5
August	24.67	24.85	24.49	57.8	84.3	85.8	89.2	55.3	72.2	96	47	41	41	39	55	24	22	.266	.271	.244	.70	.48	.0	1.8	2.8	2.8	2.4
September	24.67	24.92	24.40	49.2	78.2	77.9	81.8	47.3	64.6	91	33	36	38	36	62	27	26	.223	.243	.225	.72	.37	.0	1.6	3.1	2.7	2.4
October	24.67	24.88	24.39	36.5	64.6	64.5	69.3	33.1	51.2	78	23	24	28	26	59	26	25	.127	.151	.141	.06	.06	T	.6	2.5	2.5	1.9
November	24.66	24.91	24.33	27.8	53.2	50.6	57.5	24.6	41.0	69	12	19	22	22	68	31	32	.101	.120	.117	.22	.13	T	3.6	4.6	5.3	4.4
December	24.66	24.97	24.18	27.3	40.6	39.3	44.3	23.6	34.0	59	12	23	27	26	84	60	61	.128	.148	.144	.69	.44	2.0	4.4	6.6	6.9	6.7
Year	24.61	24.97	23.89	36.2	58.8	58.8	63.2	33.1	48.2	97	-32	26	29	28	68	39	38	.157	.174	.164	9.97	.71	45.1	3.2	4.4	4.7	4.2

MONTGOMERY, ALA.																											
[$\phi=32^{\circ}23'$ N.; $\lambda=86^{\circ}18'$ W.]																											
January	29.90	30.14	29.59	56.2	62.3	62.5	67.3	53.4	60.4	81	39	54	54	55	93	77	77	0.435	0.447	0.452	4.66	1.70	0.0	8.3	8.5	8.0	8.7
February	29.85	30.29	29.45	43.8	52.9	53.1	59.4	40.8	50.1	79	29	37	36	36	78	55	56	.247	.237	.239	5.51	1.74	.0	6.1	5.2	6.0	5.6
March	29.81	30.19	29.46	47.0	59.6	60.8	65.5	45.1	55.3	81	30	40	40	39	77	51	47	.267	.270	.262	5.59	3.13	.0	5.3	5.7	4.2	5.5
April	29.74	30.21	29.43	56.5	70.1	69.9	75.5	53.9	64.7	87	40	51	48	48	83	49	49	.399	.370	.365	6.62	2.14	.0	4.6	4.1	3.5	4.3
May	29.76	29.91	29.57	67.6	80.6	79.0	85.0	64.5	74.8	98	54	62	58	59	82	50	54	.557	.503	.516	2.87	.82	.0	3.6	4.3	4.5	4.0
June	29.73	29.93	29.41	74.8	87.1	83.8	91.0	72.0	81.5	99	68	69	68	68	84	54	61	.721	.678	.680	2.53	1.40	.0	4.7	5.1	7.0	5.8
July	29.79	29.99	29.66	74.7	87.1	83.3	91.1	71.8	81.4	96	65	70	68	68	85	53	62	.732	.682	.689	2.17	.94	.0	4.2	5.2	6.1	5.2
August	29.80	30.02	29.64	74.9	86.0	81.6	89.9	72.8	81.4	96	70	71	70	70	89	60	71	.768	.732	.744	5.67	5.84	.0	4.5	5.6	6.3	5.5
September	29.79	30.09	29.48	67.4	80.0	77.4	83.6	65.9	74.8	91	54	64	63	64	88	57	64	.609	.590	.607	7.20	1.42	.0	5.2	5.5	4.9	5.2
October	29.79	30.09	29.50	57.2	69.5	67.2	73.2	54.8	64.0	91	33	53	52	53	86	58	63	.434	.435	.441	4.81	2.40	.0	5.1	5.4	4.3	5.1
November	29.88	30.40	29.39	46.3	57.4	55.7	61.6	43.6	52.6	77	25	39	40	40	77	55	58	.266	.277	.275	3.24	1.84	.0	6.2	5.1	4.4	5.4
December	29.94	30.20	29.41	42.9	53.7	52.3	57.8	40.6	49.2	73	16	36	38	38	77	56	59	.237	.254	.260	2.29	1.23	T	6.6	6.3	5.8	6.3
Year	29.82	30.40	29.39	59.1	70.5	68.9	75.1	56.6	65.8	99	16	54	53	53	83	56	60	.473	.456	.461	53.16	5.84	T	5.4	5.5	5.4	5.6

MOORHEAD, MINN.																											
[$\phi=46^{\circ}52'$ N., $\lambda=96^{\circ}44'$ W.]																											
January	29.08	29.57	28.04	-7.6	-3.9	-4.3	2.9	-15.1	-6.1	33	-33	-10	-7	-6	91	86	91	0.028	0.030	0.031	1.55	0.51	27.3	6.2	8.0	7.9	7.5
February	28.94	29.60	28.47	2.4	9.8	10.8	15.3	-4.2	5.6	36	-27	1	6	8	94	84	89	.047	.059	.069	.77	.43	15.7	6.7	7.2	6.9	7.2
March	29.15	29.55	28.63	17.9	26.3	26.4	30.1	14.8	22.4	46	-4	15	19	20	88	71	74	.090	.106	.107	.30	.13	2.1	6.3	7.5	7.0	7.0
April	28.90	29.31	28.55	34.3	44.1	45.4	48.7	32.8	40.8	62	21	31	34	35	88	70	69	.179	.199	.206	4.69	1.36	16.7	6.8	7.8	7.8	7.6
May	28.93	29.37	28.49	50.2	63.2	64.5	68.5	47.4	58.0	89	33	43	42	42	78	49	47	.287	.278	.279	1.37	.32	10.6	5.6	7.2	6.6	6.7
June	28.90	29.21	28.20	56.9	70.4	71.1	74.3	53.0	63.6	87	37	51	50	52	81	52	53	.383	.386	.404	1.89	.74	16.3	6.3	7.2	6.7	6.5
July	28.92	29.15	28.61	63.6	79.1	80.0	83.5	60.7	72.1	101	50	58	57	60	82	50	53	.491	.483	.525	2.68	1.79	10.0	6.2	6.0	4.2	5.5
August	28.90	29.23	28.56	64.4	81.3	81.2	86.2	62.1	74.2	98	50	59	60	60	84	50	52	.513	.531	.546	3.59	1.03	10.0	5.2	4.7	4.4	4.9
September	28.99	29.32	28.47	50.0	65.2	65.4	70.3	47.6	59.0	96	33	46	46	46	85	53	52	.325	.335	.345	1.56	1.04	10.0	5.2	5.9	5.6	5.8
October	28.99	29.58	28.45	37.3	49.0	48.3	53.7	34.5	44.1	86	16	31	33	33	78	56	57	.184	.199	.196	.11	.09	2.1	6.3	7.1	7.6	7.0
November	29.00	29.50	28.35	21.5	30.0	29.1	34.8	17.7	26.2	66	-8	18	21	22	86	70	76	.109	.122	.124	.44	1.8	2.8	6.1	7.5	6.4	7.1
December	29.07	29.53	28.45	7.9	13.8	13.5	20.4	1.0	10.7	39	-22	6	10	10	91	82	85	.061	.072	.073	.94	.37	16.6	5.9	7.4	6.2	7.3
Year	28.98	29.60	28.04	33.2	44.0	44.3	49.1	29.4	39.2	101	-33	29	31	32	86	64	66	.025	.233	.242	19.89	1.79	81.2	6.1	7.0	6.4	6.7

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

MOBILE, ALA.

[H=10 ft.; H_b=57 ft.; h_t=86 ft.; h_r=78 ft.; h_a=161 ft.]

Month	Wind													Number of days																	
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from											Precipitation	Snow		Fog		Maximum 32° temp.		Elec- tricity							
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora		
January	10.3	S.	25	SW.	0	9	10	8	14	14	1	0	6	0	0	0	6	6	27	12	8	0	0	0	9	4	0	0	0	0	0
February	11.6	N.	35	N.	1	17	6	3	1	11	3	1	14	0	6	6	16	7	6	0	0	0	0	4	0	0	0	1	2	0	
March	10.2	S.	29	N.	0	15	2	2	3	15	5	2	18	0	9	11	11	10	8	0	0	0	0	2	2	0	0	3	4	0	
April	10.4	S.	50	E.	1	4	2	1	5	23	7	5	12	1	13	9	9	9	8	0	0	0	2	2	0	0	0	0	6	0	
May	7.7	S.	29	E.	0	4	3	2	3	19	14	7	10	0	15	12	4	8	5	0	0	0	2	2	0	0	0	0	9	0	
June	7.7	S.	38	SE.	2	6	3	2	4	13	12	11	9	0	4	15	11	16	11	0	0	0	1	0	0	13	0	18	0		
July	7.7	SW.	38	NW.	2	9	0	4	1	10	14	11	13	0	7	17	7	7	7	0	0	0	1	0	0	21	0	12	0		
August	6.8	S.	36	E.	1	8	9	7	2	13	7	4	12	0	0	17	14	19	14	0	0	0	3	0	12	0	26	0			
September	8.6	N.	26	NW.	0	16	13	5	3	4	8	3	7	1	10	6	14	10	6	0	0	0	5	0	6	6	0	8	0		
October	10.2	NW.	32	SE.	1	12	10	2	1	11	6	5	15	0	12	9	10	9	8	0	0	0	7	2	0	1	0	3	0		
November	9.8	N.	31	NW.	0	16	8	5	4	7	3	2	15	0	11	5	14	8	7	0	0	0	4	0	0	0	4	1	0		
December	8.8	N.	32	S.	1	8	10	9	8	8	3	2	14	0	8	5	18	6	5	0	0	0	10	6	0	0	7	0	0		
Year	9.2	S.	50	E.	9	124	76	50	49	148	83	53	145	2	95	116	154	121	93	0	0	0	60	16	0	60	15	89	0		

MODENA, UTAH

[H=5,460 ft.; H_b=5,473 ft.; h_t=10 ft.; h_r=3 ft.; h_a=46 ft.]

January	9.8	W.	32	S.	1	1	3	5	3	4	19	26	0	1	15	8	8	12	5	14	12	0	0	0	28	0	31	0	0
February	9.6	W.	32	S.	2	3	5	1	1	3	17	22	3	1	11	6	11	7	3	6	5	0	0	0	6	0	27	0	0
March	9.1	W.	34	SW.	2	5	4	6	1	9	15	18	3	1	12	3	16	11	10	9	8	0	0	0	0	26	2	1	0
April	11.6	SW.	37	SW.	5	3	6	12	0	5	16	12	6	0	11	8	11	4	3	6	3	1	0	0	0	0	19	2	0
May	10.3	SW.	41	SW.	2	2	3	2	1	8	23	16	6	1	13	10	8	4	2	1	1	0	0	0	0	3	3	0	0
June	10.5	SW.	35	SW.	2	1	3	4	3	7	22	18	2	0	17	10	3	1	1	1	0	0	0	0	0	5	0	2	0
July	9.3	SW.	35	NW.	1	6	3	1	4	4	24	15	5	0	13	9	9	13	11	0	0	0	1	1	0	12	0	19	0
August	10.2	SW.	35	S.	1	2	3	4	0	12	19	20	2	0	21	10	0	5	3	0	0	0	0	0	0	10	0	7	0
September	9.5	W.	38	S.	2	1	5	4	3	8	14	25	0	0	21	7	2	4	4	0	0	0	1	0	0	3	0	8	0
October	9.0	W.	32	SW.	1	2	4	13	1	9	5	21	7	0	23	7	1	1	1	1	0	0	1	0	0	0	16	1	0
November	8.8	W.	32	S.	1	2	5	8	1	4	18	20	2	0	12	6	2	2	2	2	0	0	0	0	0	28	0	0	0
December	8.9	SW.	38	SW.	1	4	9	9	0	1	27	12	0	0	8	3	20	7	5	6	3	0	5	2	0	0	27	0	0
Year	9.7	SW.	41	SW.	21	32	53	69	18	74	219	225	36	4	177	93	95	71	50	46	32	1	8	3	34	30	177	43	0

MONTGOMERY, ALA.

[H=201 ft.; H_b=218 ft.; h_t=92 ft.; h_r=90 ft.; h_a=105 ft.]

January	8.3	E.	21	SW.	0	7	6	15	14	9	1	4	6	0	0	6	25	16	10	0	0	0	0
February	8.7	N.	28	NW.	0	10	5	6	5	5	5	6	14	0	10	5	13	9	9	0	0	0	0
March	7.5	N.	19	NW.	0	14	3	4	8	5	7	7	12	2	8	11	12	10	7	0	0	0	0
April	7.5	SW.	31	W.	0	6	4	6	9	9	13	5	8	0	15	6	9	9	7	0	0	0	0
May	6.1	W.	27	N.	0	9	5	11	3	4	8	14	7	1	15	12	4	8	8	0	0	0	0
June	6.3	SW.	24	SW.	0	6	2	0	8	12	16	13	3	0	5	17	8	10	8	0	0	0	0
July	6.4	SW.	27	W.	0	5	3	8	8	6	14	13	5	0	8	17	6	10	8	0	0	0	0
August	6.0	SE.	24	SE.	0	3	12	15	16	7	5	3	0	1	9	13	9	16	12	0	0	0	0
September	6.3	NE.	20	SW.	0	11	12	12	8	1	6	4	4	2	12	8	10	7	4	0	0	0	0
October	7.4	N.	19	NW.	0	11	10	10	7	6	3	4	9	2	13	6	12	13	12	0	0	0	0
November	7.7	N.	21	N.	0	17	12	11	6	1	2	5	6	0	10	8	12	8	7	0	0	0	0
December	6.6	N.	21	S.	0	9	12	11	7	2	4	5	10	2	9	6	16	7	5	2	0	0	0
Year	7.1	N.	31	W.	0	108	86	109	99	67	84	83	84	10	114	115	136	123	97	2	0	0	0

MOORHEAD, MINN.

[H=904 ft.; H_b=940 ft.; h_t=50 ft.; h_r=43 ft.; h_a=58 ft.]

January	9.0	N.	27	NW.	0	17	3	3	5	12	2	6	14	0	3	11	17	14	9	21	14	0	0
February	10.0	NW.	26	NW.	0	8	0	1	5	13	2	6	21	0	1	14	13	8	4	17	8	0	0
March	8.4	N.	25	NE.	0	23	6	4	4	10	3	5	6	1	4	14	13	4	3	15	3	0	0
April	10.5	N.	31	N.	0	19	2	6	9	11	1	3	8	1	2	11	17	10	10	6	3	2	0
May	10.0	S.	24	E.	0	16	5	4	10	13	2	2	8	2	5	12	14	14	9	0	0	3	0
June	7.9	S.	25	W.	0	11	2	5	4	20	6	3	7	2	6	10	14	11	8	0	0	2	0
July	8.1	S.	27	NW.	0	11	5	6	8	16	2	2	10	2	10	12	9	9	6	0	0	1	0
August	8.0	S.	26	SW.	0	9	5	1	12	22	4	6	3	0	11	15	5	11	9	0	0	1	0
September	8.4	S.	25	NW.	0	16	5	1	1	19	3	7	12	0	9	12	9	8	4	0	0	0	0
October	9.7	S.	24	W.	0	14	2	0	7	16	5	6	8	0	5	12	14	2	1	4	0	0	0
November	9.9	NW.	26	NW.	0	14	0	0	3	13	2	8	18	2	6	4	20	8	3	17	7	0	0
December	9.6	NW.	26	NW.	0	11	4	1	6	15	3	5	17	0	6	5	20	7	5	18	7	0	0
Year	9.2	S.	31	N.	0	169	39	32	74	180	35	59	132	10	68	132	165	106	71	98	42	7	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

NANTUCKET, MASS.

[$\phi=41^{\circ}17' N.$; $\lambda=70^{\circ}06' W.$]

Month	Pressure			Temperature								Moisture															
	Extremes			Mean				Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness							
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	7.1	7.4	5.2	8.3
January	30.24	30.82	29.58	38.7	41.4	39.2	45.3	34.8	40.0	56	25	34	34	35	82	76	86	0.202	0.209	0.216	4.09	1.54	1.5	5.9	6.5	5.3	7.5
February	29.90	30.35	29.15	34.1	38.3	35.4	40.8	30.4	35.6	52	16	29	29	29	80	68	76	.164	.162	.165	1.30	.50	3.1	5.5	5.7	5.9	6.5
March	29.83	30.39	29.28	34.2	38.5	36.5	41.8	30.5	36.2	50	20	26	25	28	69	60	72	.142	.140	.158	3.03	1.18	T	4.6	4.5	4.9	5.6
April	29.98	30.55	29.37	43.6	46.9	42.3	48.9	38.9	43.9	60	32	36	37	37	77	70	83	.221	.225	.227	5.29	1.56	T	5.2	7.2	6.0	7.1
May	29.95	30.30	29.66	54.5	58.9	51.6	61.3	48.1	54.7	75	42	48	50	47	80	72	86	.340	.359	.330	2.16	.62	.0	3.9	5.3	4.2	5.9
June	29.89	30.33	29.43	61.4	65.3	59.8	67.8	55.9	61.8	77	50	59	59	58	92	82	93	.494	.511	.479	4.74	1.59	.0	5.2	7.2	6.0	7.1
July	29.96	30.17	29.59	68.1	73.3	66.2	75.2	61.9	68.6	86	58	65	65	63	89	77	90	.614	.624	.582	1.26	.74	.0	5.3	4.9	5.9	5.5
August	30.06	30.30	29.80	70.7	75.9	69.4	77.9	65.7	71.8	84	58	68	69	67	93	79	93	.700	.712	.672	3.39	1.71	.0	5.3	5.7	4.3	6.0
September	30.02	30.48	29.40	63.0	67.3	61.0	69.5	57.4	63.4	81	49	57	57	57	82	70	88	.486	.482	.485	4.27	1.53	.0	3.5	3.9	3.3	4.6
October	30.03	30.61	29.39	53.2	57.5	52.9	59.2	48.2	53.7	72	40	46	47	48	78	69	78	.334	.341	.324	4.37	1.34	T	5.1	4.9	3.3	5.8
November	30.02	30.51	29.34	44.1	49.4	46.5	51.9	40.5	46.2	62	28	38	39	39	80	69	76	.242	.251	.252	3.36	1.58	T	5.4	4.9	4.2	5.4
December	30.05	30.57	29.13	35.6	38.2	36.3	41.6	31.2	36.4	55	21	29	29	28	76	69	73	.166	.166	.164	2.76	1.31	.4	6.5	6.4	3.6	6.5
Year	29.99	30.82	29.13	50.1	54.2	49.8	56.8	45.3	51.0	86	16	45	45	45	82	72	83	.342	.348	.338	40.02	1.71	6.0	5.3	5.6	4.7	6.2

NASHVILLE, TENN.

[$\phi=36^{\circ}10' N.$; $\lambda=86^{\circ}47' W.$]

January	29.57	29.86	29.06	44.3	48.7	49.0	55.1	39.0	47.0	73	27	41	43	43	88	80	81	0.272	0.295	0.297	14.75	2.64	0.0	9.0	8.6	8.5	9.0
February	29.51	30.00	28.97	36.2	42.9	42.5	48.4	32.0	40.2	77	20	29	29	31	75	58	65	.171	.173	.189	1.90	.82	1.2	7.3	6.7	6.5	6.8
March	29.50	29.83	28.97	38.8	50.0	50.3	55.5	36.0	45.8	73	25	33	34	33	80	54	54	.195	.201	.198	1.57	.54	.0	5.0	5.6	6.2	5.7
April	29.38	29.89	29.02	52.4	64.5	63.8	69.6	48.5	59.0	87	36	44	44	43	74	52	50	.303	.316	.303	3.73	1.27	.0	5.8	5.6	5.5	5.9
May	29.43	29.60	29.20	62.1	74.6	73.0	78.2	59.1	68.6	96	47	56	55	55	80	53	57	.454	.443	.453	5.33	1.78	.0	5.0	6.2	5.1	5.8
June	29.40	29.70	29.15	71.7	83.9	81.3	87.7	68.5	78.1	96	59	64	63	63	77	49	55	.607	.580	.579	2.65	.80	.0	5.3	5.3	5.6	5.5
July	29.45	29.68	29.29	71.0	84.5	82.0	88.5	67.9	78.2	96	55	64	62	62	80	48	54	.612	.567	.576	2.49	.87	.0	4.3	4.2	4.9	4.3
August	29.46	29.71	29.29	72.9	86.5	85.1	90.9	71.0	81.0	98	64	68	65	65	84	52	54	.681	.624	.624	2.17	.95	.0	3.3	5.3	4.6	5.0
September	29.49	29.82	29.23	61.6	76.1	74.8	80.0	60.1	70.0	91	43	57	57	57	84	54	56	.485	.493	.491	2.05	.60	.0	3.8	4.5	3.5	4.1
October	29.48	29.86	29.07	51.6	63.5	62.0	67.2	48.8	58.0	87	29	46	47	47	82	58	61	.337	.359	.351	4.31	1.33	.0	5.2	6.0	4.9	5.9
November	29.58	30.11	29.00	41.1	49.7	48.6	54.4	37.8	46.1	75	18	36	37	37	82	65	68	.223	.243	.241	2.03	.48	.1	5.2	5.9	4.0	5.5
December	29.61	29.97	28.99	35.4	42.8	42.4	46.5	32.2	39.4	65	11	33	34	34	86	73	73	.207	.227	.223	3.12	.96	.2	7.1	7.6	7.1	7.7
Year	29.49	30.11	28.97	53.3	64.0	62.9	68.5	50.1	59.3	98	11	48	48	48	81	58	61	.379	.377	.377	46.13	2.64	1.8	5.7	6.0	5.5	5.9

NEW HAVEN, CONN.

[$\phi=41^{\circ}18' N.$; $\lambda=72^{\circ}56' W.$]

January	30.15	30.74	29.40	34.4	39.5	38.6	44.5	30.7	37.6	64	17	27	28	30	75	64	71	0.162	0.171	0.175	6.68	1.09	4.3	7.4	7.5	6.9	7.4
February	29.85	30.27	29.12	29.7	37.1	34.9	40.6	26.5	33.6	52	10	20	21	21	65	51	58	.116	.121	.125	2.22	.97	4.0	5.6	5.5	5.2	5.6
March	29.78	30.31	29.20	30.5	37.2	35.9	41.1	27.9	34.5	57	18	18	19	21	59	48	54	.104	.103	.115	4.33	2.29	2.0	4.7	5.9	4.9	5.4
April	29.90	30.46	29.41	44.2	51.1	48.6	54.8	39.8	47.3	70	32	33	32	33	64	53	58	.192	.192	.197	4.75	1.98	T	6.0	6.9	6.0	6.4
May	29.85	30.28	29.50	58.0	66.2	62.6	71.0	51.6	61.3	90	41	46	47	48	69	55	62	.333	.342	.354	1.98	.75	.0	5.4	5.2	5.0	5.2
June	29.80	30.21	29.34	66.2	73.2	69.5	76.6	60.8	68.7	89	54	57	56	58	72	60	69	.467	.471	.485	4.54	2.23	.0	6.1	6.2	6.9	6.5
July	29.86	30.06	29.52	70.9	78.3	75.4	82.5	65.2	73.8	95	55	62	62	64	73	59	69	.554	.573	.602	4.21	1.48	.0	5.1	5.2	5.7	5.4
August	29.96	30.21	29.68	71.4	79.9	75.1	83.0	67.1	75.0	95	57	66	66	67	82	66	76	.639	.653	.667	7.00	2.92	.0	6.4	5.2	5.9	5.7
September	29.96	30.47	29.43	58.6	68.3	64.1	71.7	54.0	62.8	92	42	52	52	54	79	59	70	.405	.416	.436	2.90	2.00	.0	3.2	4.1	3.7	4.0
October	29.94	30.55	29.24	48.8	58.6	54.1	60.1	44.7	52.4	73	31	42	42	44	79	57	68	.294	.297	.307	5.80	3.45	.0	5.7	5.9	4.7	5.7
November	29.94	30.48	29.26	40.3	49.4	46.1	51.5	36.7	44.1	64	23	32	34	35	71	55	65	.190	.201	.216	5.80	3.41	.4	5.3	5.6	4.5	5.4
December	30.00	30.46	29.11	30.3	35.6	34.3	38.7	27.4	33.0	47	17	20	19	20	64	51	54	.112	.112	.115	2.95	1.05	1.7	5.6	4.7	4.9	5.5
Year	29.92	30.74	29.11	48.6	56.2	53.3	59.7	44.4	52.0	98	10	40	40	41	71	56	64	.297	.305	.316	53.16	3.45	12.4	5.5	5.7	5.4	5.7

NEW ORLEANS, LA.

[$\phi=29^{\circ}57' N.$; $\lambda=90^{\circ}04' W.$]

January	30.02	30.27	29.77	62.1	68.1	66.2	72.0	59.0	65.5	83	48	59	60	61	91	78	84	0.531	0.554	0.556	3.93	1.41	0.0	8.9	8.6	8.4	8.7
February	30.04	30.51	29.68	50.8	59.1	58.4	63.7	48.6	56.2	78	37	42	45	44	75	61	62	.298	.334	.330	2.15	1.21	.0	6.7	7.2	6.6	7.0
March	30.02	30.41	29.64	52.2	63.3	61.9	67.5	49.9	58.7	81	35	47	48	48	83	58	62	.349	.356	.361	5.58	1.66	.0	6.5	5.8	5.8	5.9
April	29.93	30.34	29.46	62.8	74.3	72.0	78.1	60.4	69.2	85	45	53	56	57	84	54	61	.501	.478	.497	7.42	4.80	.0	5.2	4.7	4.9	4.8
May	29.94	30.07	29.79	71.9	82.0	80.8	85.4	69.6	77.5	92	63	65	60	62	80	49	55	.628	.537	.577	3.36	.38	.0	2.9	4.4	3.3	4.0
June	29.92	30.15	29.66	77.5	84.9	82.6	89.3	73.9	81.6	95	65	71	69	70	82	61	66	.769	.709	.729	8.87	2.66	.0	4.8	6.8	6.2	6.2
July	29.99	30.13	29.81	79.1	87.4	84.7	91.1	76.4	83.8	95	71	73	70	72	82	57	65	.809	.727	.773	3.38	1.33	.0	4.1	5.7	6.6	5.9
August	29.95	30.17	29.73	78.6	86.4	82.9	90.3	75.8	83.0	95	68	74	72	73	86	63	73	.843	.781	.814	7.94	2.46	.0	4.2	6.6	7.3	6.6
September	29.94	30.18	29.72	73.9	83.3	80.2	86.6	72.5	79.6	94	60	63	67	68	83	59	67	.707	.671	.690	6.24	2.46	.0	4.0	5.0	4.9	5.0
October	29.95	30.18	29.70	64.3	73.9	70.9	76.9	62.5	69.7	90	45	59	58	60	84	61	70	.539	.533	.561	25.11	13.68	.0	4.7	4.5	3.9	4.5
November	30.06	30.48	29.55	52.2	62.4	59.0	64.8	50.6	57.7	81	32	46	45	46	79	57	65	.349	.331	.349	1.45	.49	.0	4.3	5.0	4.4	4.8
December	30.11	30.39	29.66	49.4	58.8	55.9	61.8	47.1	54.4	74	30	45	47	46	84	66	72	.325	.361	.349	3.97	1.60	.0	4.0	6.1	5.8	6.0
Year	29.99	30.51	29.46	64.6	73.7	71.3	77.3	62.2	69.2	95	30	59	58	59	83	60	67	.554	.531	.549	79.40	13.68	.0	5.0	5.9	5.7	5.8

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

NANTUCKET, MASS.

[H=35 ft.; H_b=12 ft.; h_t=14 ft.; h_r=4 ft.; h_a=90 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7.30 a. m., and 7.30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temp.		32° or below	Election			
																	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted			Hail	Light			Dense	32° or below	90° or above
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest								Calm								
January	16.2	SW.	39	S.	5	6	12	5	8	4	12	6	9	0	4	4	23	16	16	4	1	0	14	12	1	0	13	0	0
February	16.9	N.	51	N.E.	9	8	6	22	4	3	10	11	12	0	2	7	19	9	6	8	4	0	9	3	3	0	14	0	0
March	15.5	W.	38	SW.	6	8	2	6	3	2	8	20	13	0	11	3	17	14	10	9	3	0	5	2	2	0	20	1	0
April	16.3	N.E.	45	E.	9	9	10	8	5	6	7	10	5	0	11	6	13	17	12	2	1	0	11	7	0	0	20	0	1
May	13.4	SW.	34	N.E.	3	6	6	5	6	14	15	9	1	0	13	4	14	10	7	0	0	0	13	10	0	0	0	1	0
June	11.9	N.	32	S.	1	13	9	5	6	13	7	3	4	0	5	6	19	15	13	0	0	0	23	17	0	0	0	6	0
July	11.3	SW.	30	N.E.	0	6	8	5	3	14	18	6	2	0	12	7	12	8	7	0	0	0	21	13	0	0	0	0	0
August	12.5	SW.	38	N.E.	1	2	6	6	5	21	18	2	2	0	10	7	14	8	6	0	0	0	23	14	0	0	0	4	0
September	13.8	SW.	47	N.E.	3	6	13	6	5	7	8	11	4	0	12	9	9	9	7	0	0	0	13	6	0	0	0	2	0
October	14.5	W.	45	N.E.	5	5	4	8	7	12	8	8	10	0	11	6	14	10	6	0	0	0	6	4	0	0	0	2	2
November	14.6	N.W.	38	SW.	4	4	4	4	3	3	12	19	10	1	10	7	13	11	9	1	1	0	9	2	0	0	2	0	0
December	14.9	N.W.	47	N.E.	5	12	4	4	1	3	10	14	14	0	8	7	16	9	9	4	2	0	6	2	4	0	18	0	0
Year	14.3	SW.	51	N.E.	51	85	84	64	56	102	133	119	86	1	109	73	183	136	108	28	12	0	153	92	10	0	69	16	3

NASHVILLE, TENN.

[H=484 ft.; H_b=546 ft.; h_t=168 ft.; h_r=161 ft.; h_a=188 ft.]

January	10.8	S.	32	NW.	1	9	13	8	6	12	2	5	7	0	2	4	25	21	19	0	0	0	2	2	0	0	6	2	0
February	11.4	NW.	39	SE.	3	6	0	4	5	13	7	4	17	0	3	12	13	11	8	6	2	0	0	0	2	0	16	2	0
March	10.0	NW.	38	SE.	2	6	6	7	4	7	5	5	22	0	8	12	11	8	6	2	1	0	1	1	0	0	12	2	0
April	10.6	SE.	56	SE.	4	2	7	7	12	7	8	9	8	0	5	14	11	10	7	0	0	0	0	0	0	0	7	0	0
May	7.6	N.E.	33	W.	1	5	9	8	9	7	6	8	9	1	7	14	10	10	9	0	0	0	2	2	0	6	0	6	0
June	7.7	NW.	31	W.	0	8	4	7	4	6	6	15	9	1	5	18	7	12	7	0	0	0	4	1	0	10	0	13	0
July	7.0	W.	36	NW.	1	6	3	3	5	2	11	21	10	1	12	14	5	9	8	0	0	0	1	0	0	14	0	12	0
August	6.5	SW.	26	N.E.	0	4	7	11	6	7	10	9	4	4	9	16	6	11	9	0	0	0	0	0	0	23	0	10	0
September	7.5	N.	22	N.	0	13	10	3	6	10	4	3	7	4	14	7	9	8	7	0	0	0	2	0	0	1	0	2	0
October	9.2	SW.	35	SE.	2	5	10	5	8	5	9	7	12	1	9	8	14	10	8	0	0	0	4	1	0	0	2	1	0
November	8.6	NW.	26	W.	0	4	5	8	9	8	5	6	15	0	11	7	12	11	10	3	1	0	7	3	1	0	11	1	0
December	7.9	SW.	24	NW.	0	6	7	6	6	10	8	7	9	3	5	4	22	13	9	4	2	0	15	8	4	0	15	0	0
Year	8.7	NW.	56	SE.	14	74	81	77	80	94	81	99	129	15	90	130	145	134	107	15	6	0	38	18	7	54	62	58	0

NEW HAVEN, CONN.

[H=23 ft.; H_b=106 ft.; h_t=74 ft.; h_r=68 ft.; h_a=153 ft.]

January	9.3	N.	27	SW.	0	17	12	0	2	9	10	3	9	0	6	6	19	15	14	6	2	0	18	4	2	0	0	0	0
February	10.0	N.	35	SE.	1	15	3	2	3	7	7	4	15	0	8	12	8	7	6	6	0	7	5	5	0	23	0	0	0
March	10.0	NW.	30	N.E.	0	15	5	2	1	3	6	14	15	1	9	9	13	11	8	12	4	0	6	0	3	0	25	0	0
April	10.4	N.	33	N.	1	22	6	6	4	8	5	3	6	0	6	11	13	13	11	4	1	0	8	0	0	0	1	1	2
May	8.0	N.	27	N.E.	0	11	5	0	12	16	6	5	5	2	9	12	10	11	8	0	0	0	9	4	0	1	0	4	1
June	7.5	N.	21	S.	0	17	5	5	9	8	3	3	9	1	7	9	14	11	0	0	0	0	12	4	0	0	0	7	0
July	7.5	S.	30	SW.	0	14	4	6	5	15	12	2	4	0	8	14	9	8	6	0	0	0	11	0	0	6	0	7	0
August	7.9	N.	27	SW.	0	16	4	2	4	20	9	2	5	0	9	10	12	11	9	0	0	0	18	2	0	5	0	8	1
September	8.2	S.	26	N.E.	0	20	4	4	1	8	8	7	7	1	16	9	5	6	6	0	0	0	19	1	0	2	0	1	0
October	9.5	N.	30	W.	0	18	3	2	3	12	7	3	14	0	9	10	12	11	6	0	0	0	12	2	0	0	1	0	2
November	9.0	W.	37	E.	1	10	2	3	2	6	8	15	14	0	12	7	11	11	8	3	1	0	11	0	0	0	6	0	0
December	9.0	N.	26	NW.	0	24	3	0	0	3	10	6	15	1	12	6	13	9	9	8	3	0	10	1	5	0	22	0	0
Year	8.9	N.	37	E.	3	199	56	32	46	115	91	67	118	6	111	115	139	127	102	39	13	0	141	23	15	14	98	28	6

NEW ORLEANS, LA.

[H=9 ft.; H_b=53 ft.; h_t=76 ft.; h_r=71 ft.; h_a=84 ft.]

January	8.2	SE.	19	SE.	0	5	16	7	17	12	1	0	3	1	0	5	26	19	13	0	0	0	7	3	0	0	0	0	0
February	8.6	N.E.	21	N.E.	0	7	16	7	7	8	2	1	8	0	4	9	15	7	7	0	0	0	4	3	0	0	0	1	0
March	7.6	N.E.	20	N.E.	0	7	17	5	16	2	4	3	8	0	8	11	12	12	9	0	0	0	1	0	0	0	0	6	0
April	7.3	SE.	28	SE.	0	2	3	3	19	9	10	4	9	1	11	10	9	8	7	0	0	0	3	1	0	0	0	6	0
May	5.7	SE.	26	E.	0	5	5	2	16	8	10	7	9	0	14	15	2	5	5	0	0	0	1	0	0	2	0	5	0
June	5.7	SE.	19	NW.	0	2	4	2	15	8	14	8	2	5	5	14	11	18	12	0	0	0	0	0	0	12	0	19	0
July	5.5	SW.	27	N.E.	0	0	5	1	11	8	14	15	4	4	2	21	8	13	8	0	0	0	0	0	0	22	0	13	0
August	5.4	SE.	20	E.	0	4	9	6	12	7	10	4	3	7	2	20	9	15	13	0	0	0	0	0	0	19	0	19	0
September	6.6	N.E.	19	E.	0	3	20	8	12	2	5	6	1	3	11	9	10	14	12	0	0	0	1	0	0	9	0	7	0
October	7.7	N.E.	22	N.E.	0	1	20	6	8	5	9	4	5	4	15	6	10	12	10	0	0	0	3	2	0	0	0	3	0
November	7.7	N.E.	19	N.E.	0	11	20	7	7	1	3	4	6	1	14	5	11	9	7	0	0	0	5	4	0	0	1	1	0
December	6.9	SE.	19	SW.	0	7	11	13	16	0	5	2	5	3	8	10	13	7	5	0	0	0	9	7	0	0	3	1	0
Year	6.9	SE.	28	SE.	0	54	146	67	156	70	87	58	63	29	94	135	136	139	108	0	0	0	34	20	0	64	4	81	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

NEW YORK, N. Y.

[$\phi=40^{\circ} 43' N.$; $\lambda=74^{\circ} 00' W.$]

Month	Pressure			Temperature										Moisture													
	Extremes			Mean							Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation		Cloudiness						
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	
January	29.91	30.46	29.23	38.2	41.1	41.1	47.1	33.8	40.4	65	24	30	32	32	73	71	72	0.183	0.198	0.197	6.01	0.96	3.9	7.1	7.5	6.7	7.6
February	29.63	30.05	28.97	31.3	36.9	35.9	42.2	27.6	34.9	56	13	22	22	20	67	55	53	.126	.129	.118	1.87	.82	3.6	6.3	6.1	5.3	6.1
March	29.57	30.09	29.08	32.5	38.2	37.5	43.1	30.0	36.6	60	19	21	22	23	60	52	58	.113	.121	.129	2.98	1.04	1.9	5.0	6.3	4.4	5.6
April	29.66	30.18	29.15	45.2	52.0	49.7	56.2	41.9	49.0	70	33	33	33	34	64	52	59	.198	.199	.208	5.00	1.64	T	6.0	6.4	6.5	6.1
May	29.63	30.08	29.23	58.3	68.1	64.1	72.7	53.9	63.3	88	44	48	48	48	71	52	59	.354	.358	.356	2.64	1.60	.0	5.3	5.0	5.0	5.0
June	29.57	29.95	29.11	67.1	74.2	71.4	78.5	62.6	70.6	96	54	58	58	59	75	60	68	.493	.504	.517	3.07	.93	.0	6.3	7.0	7.0	6.6
July	29.64	29.83	29.32	71.7	79.5	76.1	82.9	67.8	75.4	96	58	62	62	64	72	56	68	.563	.560	.601	4.41	1.75	.0	4.9	5.6	5.9	5.3
August	29.74	29.98	29.45	71.5	79.7	75.3	82.8	68.6	75.7	93	58	67	66	67	86	65	76	.669	.648	.661	7.92	2.99	.0	5.9	5.3	6.6	5.5
September	29.73	30.22	29.24	61.4	68.4	65.5	72.8	57.6	65.2	89	45	54	53	53	76	60	66	.430	.421	.422	4.04	2.86	.0	3.6	4.8	3.2	3.9
October	29.71	30.30	28.98	51.9	57.8	55.2	61.2	47.9	54.0	76	35	44	43	42	74	59	62	.306	.301	.290	4.12	2.18	T	6.5	5.9	4.5	6.1
November	29.72	30.26	29.05	41.8	48.6	46.7	52.5	38.7	45.6	66	27	32	31	32	67	52	59	.191	.186	.199	4.12	1.91	.6	4.9	5.3	4.6	5.1
December	29.78	30.22	28.95	32.6	38.6	35.8	41.5	29.3	35.4	62	18	22	23	22	65	56	56	.128	.132	.123	1.95	.62	.4	6.2	5.1	4.5	5.8
Year	29.69	30.46	28.95	50.3	56.8	54.5	61.1	46.0	53.9	96	13	41	41	41	71	58	63	.313	.313	.318	48.13	2.99	10.4	5.7	5.9	5.4	5.7

NORFOLK, VA.

[$\phi=36^{\circ} 51' N.$; $\lambda=76^{\circ} 17' W.$]

January.....	30.15	30.60	29.65	50.1	54.2	50.9	58.7	45.0	51.8	77	37	46	48	46	78	84	84	0.333	0.353	0.329	8.46	4.07	0.0	8.9	9.5	8.6	9.4
February.....	29.94	30.41	29.20	37.5	45.1	43.0	49.9	33.8	41.8	75	22	31	31	32	76	59	67	.188	.194	.197	2.53	1.65	9.8	6.1	6.4	4.5	6.6
March.....	29.89	30.39	29.41	41.4	50.0	47.8	54.9	38.1	46.5	76	24	34	33	35	74	53	62	.196	.211	.208	3.08	1.62	T	5.3	4.8	3.9	4.9
April.....	29.90	30.32	29.35	52.7	61.7	58.2	65.9	48.2	57.0	90	40	44	41	44	74	50	61	.306	.276	.302	6.44	3.79	.0	5.5	5.6	5.4	5.9
May.....	29.91	30.29	29.63	63.9	72.7	68.0	76.8	58.4	67.6	92	45	54	52	54	72	50	62	.437	.410	.434	3.35	1.97	.0	5.1	3.7	4.4	4.5
June.....	29.84	30.13	29.47	72.9	82.1	76.4	85.6	68.0	76.8	94	60	65	64	65	78	56	69	.632	.602	.621	7.49	3.07	.0	7.5	5.1	6.5	6.4
July.....	29.90	30.10	29.70	75.7	83.9	79.3	87.4	71.5	79.4	98	63	68	67	69	79	58	73	.700	.666	.722	5.69	2.03	.0	5.9	6.7	6.9	6.4
August.....	29.99	30.22	29.79	75.5	83.8	78.8	87.3	72.0	79.6	94	66	71	68	71	86	61	78	.756	.699	.760	6.77	3.39	.0	6.3	5.6	6.5	6.4
September.....	29.98	30.39	29.57	66.5	73.4	69.2	76.5	63.3	69.9	92	55	60	58	60	80	61	74	.528	.502	.528	4.47	2.32	.0	4.6	5.6	3.9	5.1
October.....	29.97	30.50	29.30	56.0	63.2	59.5	66.8	52.3	59.6	86	40	49	47	49	79	60	71	.382	.362	.380	3.98	1.34	.0	5.7	6.3	5.0	6.2
November.....	30.03	30.59	29.39	46.0	54.8	51.7	58.7	43.7	51.2	72	30	39	37	40	76	52	66	.256	.241	.275	5.57	3.61	.0	5.3	4.9	3.5	5.2
December.....	30.07	30.49	29.41	38.2	44.8	42.7	48.4	35.8	42.1	70	24	32	31	32	79	60	65	.196	.191	.188	1.87	.55	.1	6.8	6.4	4.7	6.2
Year.....	29.96	30.60	29.20	56.4	64.1	60.5	68.1	52.5	60.3	98	22	49	48	50	78	58	69	.410	.391	.412	59.70	4.07	9.9	6.1	5.9	5.3	6.1

NORTHFIELD, VT.

[$\phi=44^{\circ} 10' N.$; $\lambda=72^{\circ} 41' W.$]

January.....	29.25	29.90	28.50	23.5	29.4	28.0	35.8	16.8	26.3	62	-1	19	20	20	82	68	71	0.113	0.119	0.111	2.37	0.76	5.6	7.1	7.5	5.7	7.2
February.....	28.98	29.43	28.11	17.8	26.9	24.2	32.4	12.3	22.4	51	-2	14	18	18	85	66	76	.085	.101	.102	2.46	.97	8.3	8.2	7.1	6.5	7.1
March.....	28.91	29.44	28.20	17.8	27.7	25.1	31.5	13.4	22.4	43	-3	13	16	17	82	59	71	.082	.092	.097	1.79	.81	18.8	7.1	7.2	5.8	7.0
April.....	29.07	29.57	28.61	35.3	45.8	41.8	49.2	27.9	38.6	65	10	29	28	30	76	53	65	.159	.155	.168	1.97	.59	5.8	6.9	6.8	6.0	6.7
May.....	29.01	29.46	28.75	50.6	63.0	57.9	67.3	40.9	54.1	90	28	44	44	46	79	56	68	.296	.303	.321	5.32	2.22	.0	6.7	6.4	6.5	6.6
June.....	28.98	29.37	28.57	59.6	69.4	65.3	73.1	49.1	61.1	87	40	54	53	55	82	58	71	.415	.406	.438	3.81	1.44	.0	6.5	6.9	6.6	6.9
July.....	29.03	29.25	28.60	64.3	77.0	69.5	80.2	55.0	67.6	91	46	59	59	61	83	54	75	.502	.502	.540	4.75	1.45	.0	5.7	5.2	4.9	5.7
August.....	29.14	29.39	28.75	63.8	77.7	69.6	81.0	57.5	69.2	91	43	60	61	64	89	58	84	.534	.550	.613	4.14	1.30	.0	7.1	5.5	4.7	6.2
September.....	29.11	29.58	28.54	50.4	64.9	55.6	68.2	43.7	56.0	89	32	47	50	50	89	61	83	.339	.385	.384	1.33	.67	.0	4.7	5.8	4.5	6.0
October.....	29.06	29.67	28.37	41.5	51.3	44.9	55.2	33.8	44.5	78	16	36	38	38	82	62	77	.233	.256	.252	3.59	1.67	T	6.9	7.5	5.7	7.5
November.....	29.04	29.59	28.52	31.5	39.7	35.4	43.9	27.3	35.6	66	6	27	29	29	83	67	76	.152	.167	.165	3.62	2.03	2.5	7.2	8.4	6.1	8.2
December.....	29.10	29.60	28.18	16.2	33.8	18.9	28.0	9.8	18.9	41	-6	13	16	15	86	71	84	.081	.093	.087	2.35	.84	15.9	6.4	6.4	5.6	6.0
Year.....	29.06	29.90	28.11	39.4	50.6	44.7	53.8	32.3	43.1	91	-6	35	36	37	83	61	75	.249	.261	.273	37.50	2.22	56.9	6.7	6.7	5.7	6.8

NORTH HEAD, WASH.

[$\phi=46^{\circ} 16' N.$; $\lambda=124^{\circ} 04' W.$]

January.....	29.83	30.33	29.29	33.0	36.0	36.0	39.4	29.5	34.4	46	20	28	29	29	80	77	76	0.159	0.167	0.165	4.19	0.71	8.3	5.7	6.3	7.2	6.6
February.....	29.71	30.07	28.93	41.2	43.7	43.6	46.9	38.5	42.7	58	31	37	39	39	86	85	84	.223	.240	.239	8.02	1.24	2.3	8.2	8.5	8.6	8.4
March.....	29.73	30.16	29.21	45.7	49.4	48.9	51.8	43.0	47.4	64	38	40	42	42	83	78	80	.252	.259	.273	3.71	.86	.0	7.8	8.8	9.0	8.5
April.....	29.83	30.18	29.21	45.1	48.2	48.0	50.4	42.0	46.2	62	39	42	42	42	88	81	81	.263	.272	.269	7.16	1.71	.0	8.8	8.9	9.1	9.0
May.....	29.86	30.26	29.48	48.6	53.1	51.8	54.8	47.0	50.9	73	43	45	46	47	88	78	84	.299	.311	.322	1.58	.59	.0	8.5	6.8	7.4	7.5
June.....	29.78	30.10	29.38	53.8	58.4	57.4	60.7	52.1	56.4	84	48	51	54	53	92	87	86	.373	.417	.406	3.13	.76	.0	8.2	6.9	6.8	7.3

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

NEW YORK, N. Y.

[H=10 ft.; H_b=314 ft.; h_t=415 ft.; h_r=308 ft.; h_a=451 ft.]

Month	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temp.	32° or below	90° or above	Minimum temperature 32° or below	Election			
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest				Calm	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail					Light	Dense	Thunderstorm	Aurora
January	14.0	N.	41	SW.	7	10	11	7	3	2	10	10	9	0	5	6	20	15	14	5	3	0	20	8	1	0	13	0	0	
February	15.5	NW.	56	NW.	13	13	4	2	4	4	5	8	16	0	6	11	11	8	6	8	3	0	7	3	1	0	19	1	0	
March	18.3	NW.	50	NW.	15	7	8	2	3	2	3	9	28	0	9	11	11	15	8	12	4	0	12	0	1	0	20	1	0	
April	15.8	N.	46	SE.	9	12	11	8	5	7	5	1	11	0	7	9	14	14	11	1	0	0	12	0	0	0	0	1	0	
May	13.0	S.	49	NW.	5	8	4	0	6	14	8	7	15	0	13	10	8	9	6	0	0	2	14	1	0	0	0	8	2	
June	11.2	N.	51	NW.	3	13	9	8	10	5	8	1	16	0	4	12	14	15	11	0	0	0	13	1	0	0	0	11	0	
July	11.1	W.	49	NW.	2	8	3	9	7	7	8	11	9	0	11	8	12	12	7	0	0	0	7	0	0	0	0	6	0	
August	10.3	SW.	49	SW.	2	7	10	8	2	13	14	5	3	0	12	7	12	17	15	0	0	0	20	1	0	2	0	14	0	
September	11.9	N.	49	N.	4	12	11	3	4	5	9	5	11	0	17	7	6	6	4	0	0	0	10	1	0	0	0	1	0	
October	15.9	NW.	47	SE.	10	10	5	6	5	8	7	7	14	0	8	9	14	13	9	1	0	0	12	0	0	0	0	0	2	
November	16.2	NW.	49	SE.	12	6	3	3	1	3	11	10	23	0	14	5	11	10	6	3	1	0	7	0	0	0	6	1	0	
December	15.1	NW.	44	W.	7	8	4	4	2	3	6	9	26	0	10	7	14	8	7	9	2	0	12	0	3	0	18	0	0	
Year	14.0	NW.	56	NW.	89	114	83	60	52	73	94	83	171	0	116	102	147	138	104	39	13	2	146	15	6	6	76	44	6	

NORFOLK, VA.

[H=11 ft.; H_b=91 ft.; h_t=80 ft.; h_r=73 ft.; h_a=125 ft.]

January	11.4	N.E.	42	N.	1	8	20	5	3	4	17	2	3	0	1	0	30	21	17	0	0	0	24	3	0	0	0	0
February	11.3	N.	39	S.E.	3	14	5	2	5	4	10	7	9	0	7	8	13	12	9	6	6	0	13	1	0	0	13	1
March	10.5	W.	32	W.	1	8	12	5	6	6	6	11	7	1	14	4	13	8	5	1	0	9	0	0	0	7	3	
April	12.4	SW.	35	S.E.	2	9	4	5	13	2	16	7	4	0	10	6	14	12	11	0	0	9	1	0	1	0	6	
May	9.3	SW.	41	N.W.	1	6	12	6	11	11	10	5	0	1	12	15	4	5	3	0	0	8	0	0	3	0	6	
June	8.5	SW.	37	N.W.	3	7	3	6	6	7	12	12	7	0	5	12	13	11	10	0	0	9	0	0	10	0	11	
July	7.6	W	31	N.W.	0	4	8	7	11	5	8	15	4	0	7	11	13	13	11	0	0	4	0	0	12	0	12	
August	7.9	SW.	27	SW.	0	2	6	8	12	12	16	4	1	1	7	10	14	12	11	0	0	5	0	0	10	0	15	
September	8.7	N.E.	29	N.W.	0	13	16	10	2	9	6	2	2	0	10	13	7	8	6	0	0	4	0	0	3	0	1	
October	10.3	W.	29	S.	0	8	8	10	9	9	5	10	2	1	9	7	15	13	11	0	0	9	1	0	0	0	1	
November	9.8	N.	30	E.	0	14	6	3	6	9	9	6	7	0	15	4	11	8	7	0	0	8	1	0	0	5	1	
December	9.5	N.	30	N.	0	16	10	4	1	7	11	7	6	0	5	13	13	9	8	3	1	0	13	0	0	10	0	
Year	9.8	SW.	42	N.	11	109	110	71	85	85	126	88	52	4	102	103	160	132	109	10	7	0	115	7	0	39	35	57

NORTHFIELD, VT.

[H=840 ft.; H_b=876 ft.; h_t=12 ft.; h_r=3 ft.; h_a=60 ft.]

January	9.2	S.	30	S.	0	14	2	0	0	22	17	0	6	1	6	5	20	14	12	15	8	0	3	1	12	0	29	0	0
February	7.5	N.	27	S.	0	15	3	0	0	21	8	0	5	4	5	7	16	12	7	17	10	0	1	1	12	0	28	0	0
March	7.5	N.	24	NE.	0	23	6	0	0	11	13	1	7	1	6	7	18	16	9	22	15	0	0	0	16	0	31	0	1
April	7.3	S.	27	S.	0	15	7	0	1	17	10	0	4	6	6	6	18	14	11	7	3	0	4	0	0	20	0	1	0
May	6.8	S.	21	S.	0	14	6	0	2	21	10	0	3	6	9	7	15	13	10	0	0	0	1	1	0	1	6	3	0
June	6.4	S.	21	NW.	0	19	9	0	2	19	7	0	1	3	3	15	12	11	9	0	0	0	3	2	0	0	5	1	0
July	6.2	S.	21	SW.	0	10	5	1	4	25	13	0	1	3	7	15	9	11	8	0	0	1	12	4	0	2	0	8	0
August	5.7	S.	21	SW.	0	8	2	0	0	29	15	0	2	6	5	16	10	10	8	0	0	1	17	8	0	2	0	11	0
September	6.4	S.	24	SW.	0	11	3	0	1	31	8	0	2	4	9	8	13	9	8	0	0	0	12	8	0	0	1	1	2
October	8.2	S.	27	S.	0	13	0	0	3	27	11	1	6	1	2	10	19	15	11	6	2	0	4	1	0	0	16	1	1
November	7.0	S.	30	SW.	0	12	0	0	1	25	15	1	4	2	2	5	23	17	12	10	4	0	4	1	3	0	22	0	1
December	6.6	S.	21	N.	0	8	4	0	0	23	16	2	5	4	9	10	12	10	6	20	10	0	1	0	21	0	31	0	0
Year	7.1	S.	30	SW.	0	162	47	1	14	271	143	5	46	41	69	111	185	152	111	97	52	2	62	27	64	5	184	29	7

NORTH HEAD, WASH.

[H=194 ft.; H_b=211 ft.; h_t=8 ft.; h_r=3 ft.; h_a=56 ft.]

January	12.9	E.	45	NW.	10	3	7	28	7	3	2	7	5	0	6	8	17	20	17	7	6	2	0	0	3	0	0	20	0	0
February	18.7	E.	70	S.	15	1	0	11	5	18	3	11	7	0	0	8	20	23	20	1	1	1	3	1	0	0	1	0	0	0
March	14.4	E.	47	S.	12	2	0	16	9	16	2	5	12	0	2	3	26	19	17	0	0	1	4	0	0	0	0	0	0	0
April	18.4	S.	61	S.	14	0	0	7	6	23	3	13	8	0	0	3	27	26	21	0	0	2	0	0	0	0	0	0	0	0
May	17.7	NW.	65	SE.	10	3	2	2	8	10	3	4	30	0	5	7	19	10	7	0	0	0	7	1	0	0	0	0	0	0
June	15.0	NW.	59	SE.	8	6	3	2	6	18	0	3	22	0	5	6	19	11	9	0	0	0	6	0	0	0	0	0	0	0
July	15.5	NW.	34	NW.	6	6	0	0	2	0	1	5	48	0	10	8	13	5	1	0	0	0	10	2	0	0	0	0	0	0
August	12.1	NW.	34	SE.	4	13	0	1	8	12	2	6	20	0	13	5	13	14	10	0	0	0	8	2	0	0	0	1	0	0
September	13.3	NW.	64	SE.	4	11	1	1	9	8	2	3	24	1	10	7	13	10	5	0	0	0	13	6	0	1	0	0	0	0
October	13.1	SE.	68	S.	11	14	1	10	14	14	1	4	4	0	8	8	15	15	11	0	0	0	12	6	0	0	0	0	0	0
November	18.8	E.	72	S.	18	3	1	17	8	18	6	3	4	0	4	4	22	27	24	0	0	1	2	0	0	0	0	1	0	0
December	17.1	E.	70	S.	15	5	0	18	4	16	5	6	8	0	4	7	20	23	22	1	0	1	2	1	0	0	0	0	0	0
Year	15.6	NW.	72	S.	127	67	15	113	86	156	30	70	192	1	67	74	224	203	164	9	7	8	67	19	3	1	21	2	0	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

NORTH PLATTE, NEBR.

[$\phi=41^{\circ}08' N.$; $\lambda=100^{\circ}45' W.$]

Month	Pressure			Temperature								Moisture															
	Monthly mean	Extremes		Mean					Extremes		Dew point	Relative humidity	Vapor pressure			Precipitation			Cloudiness								
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum			Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight	
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In</i>	<i>In.</i>	<i>In.</i>						
January	27.04	27.49	26.43	2.1	15.2	15.2	21.9	-1.4	10.2	43	-14	-1	8	11	87	70	81	0.041	0.062	0.072	0.62	0.21	7.7	4.3	3.9	4.8	4.5
February	27.01	27.56	26.26	17.8	32.6	32.2	38.3	14.7	26.5	64	-7	14	18	20	84	56	63	.084	.100	.110	.30	.22	4.8	4.3	5.3	5.2	5.3
March	27.09	27.42	26.13	26.8	40.8	41.8	46.7	24.0	35.4	73	12	24	26	26	86	60	58	.128	.144	.148	1.09	.81	4.1	6.2	6.3	6.5	6.3
April	26.95	27.36	26.49	37.5	55.2	57.9	61.1	35.8	48.4	82	24	31	29	29	77	40	36	.173	.162	.163	1.09	.51	4.0	5.8	6.2	6.7	6.1
May	27.02	27.38	26.66	52.3	69.3	69.5	74.6	50.9	62.8	92	36	46	46	45	80	46	46	.321	.316	.316	.64	.18	.0	5.0	6.1	5.7	6.0
June	27.05	27.35	26.69	59.1	73.9	76.0	79.4	57.1	68.2	104	43	54	53	53	85	53	49	.430	.416	.412	3.15	1.04	.0	5.7	4.9	6.1	5.6
July	27.06	27.28	26.85	66.1	88.3	88.8	92.8	65.1	79.0	104	60	58	58	57	77	37	36	.492	.483	.472	2.21	1.27	.0	3.4	1.9	3.6	3.2
August	27.06	27.28	26.83	66.6	87.5	89.0	93.5	65.8	79.6	105	57	59	59	58	79	41	38	.505	.513	.491	.76	.31	.0	2.9	2.8	3.1	3.0
September	27.12	27.53	26.81	55.6	75.9	75.0	79.9	53.8	66.8	96	38	49	50	50	80	43	44	.366	.379	.385	.89	.53	.0	3.3	3.8	4.2	4.0
October	27.11	27.50	26.62	41.3	60.6	57.5	65.4	38.5	52.0	88	28	35	36	37	78	43	50	.210	.215	.226	1.27	.71	T	4.5	3.8	3.5	4.0
November	27.12	27.56	26.63	27.1	44.8	41.1	48.2	25.1	36.6	71	6	22	21	24	80	48	53	.118	.130	.127	.06	.03	.6	3.1	5.7	5.1	5.3
December	27.12	27.53	26.65	20.9	34.2	30.1	39.1	16.9	28.0	58	-2	17	21	22	84	58	72	.098	.114	.120	.29	.26	3.3	3.6	3.9	4.1	4.5
Year	27.06	27.56	26.13	39.4	56.5	56.2	61.7	37.2	49.5	105	-14	34	36	36	81	50	52	.247	.253	.254	12.37	1.27	24.5	4.3	4.6	4.9	4.8

OKLAHOMA CITY, OKLA.

[$\phi=35^{\circ}26' N.$; $\lambda=97^{\circ}33' W.$]

January	28.76	29.22	28.33	27.9	33.1	31.3	38.5	22.3	30.4	60	7	25	26	25	87	75	78	0.148	0.153	0.147	1.21	0.41	3.0	7.3	7.8	7.4	7.3
February	28.74	29.33	27.95	33.0	43.9	45.3	51.1	29.8	40.4	76	12	26	25	25	74	50	48	.142	.137	.139	.12	.06	.6	4.0	5.2	6.0	5.6
March	28.76	29.10	28.10	38.3	51.4	51.5	56.6	36.3	46.4	75	21	31	32	34	75	52	54	.178	.194	.210	1.15	.50	3.4	5.2	5.1	5.4	5.2
April	28.59	28.97	28.16	51.8	66.8	66.6	71.7	49.4	60.6	91	30	44	43	42	76	46	44	.312	.304	.289	2.66	2.07	.0	3.9	4.0	4.8	4.5
May	28.65	28.99	28.33	63.3	77.5	76.6	81.6	60.9	71.2	92	49	55	57	56	76	50	51	.451	.479	.460	1.82	.65	.0	6.6	5.9	4.1	5.5
June	28.65	28.89	28.28	70.2	85.2	84.3	88.7	68.9	78.8	100	60	64	64	62	80	51	51	.600	.606	.577	4.65	1.71	.0	5.7	4.7	2.9	4.6
July	28.67	28.86	28.42	74.3	90.8	91.2	95.3	73.4	84.4	102	64	65	64	62	75	44	40	.630	.614	.572	.74	.28	.0	5.8	4.1	3.5	4.6
August	28.68	28.87	28.52	75.6	93.6	90.4	96.7	75.0	85.8	107	68	67	66	64	76	42	46	.666	.636	.598	2.44	1.45	.0	4.9	5.3	4.6	5.0
September	28.73	29.06	28.50	65.9	81.1	78.9	85.4	64.6	75.0	95	47	58	59	58	77	49	51	.515	.527	.505	2.90	1.48	.0	4.3	4.1	3.5	4.0
October	28.74	29.14	28.26	53.6	68.8	65.8	72.8	51.4	62.1	95	34	45	46	46	75	48	53	.318	.325	.323	2.25	.85	.0	3.6	4.1	3.9	3.9
November	28.82	29.30	28.38	40.5	50.2	48.2	54.5	37.3	45.9	82	18	33	34	34	76	56	60	.204	.212	.213	2.47	2.02	T	5.4	6.1	4.7	5.7
December	28.83	29.19	28.30	34.3	40.5	39.7	44.2	31.2	37.7	58	16	30	31	32	84	70	74	.185	.189	.197	1.12	.86	T	6.7	7.2	6.8	7.0
Year	28.72	29.33	27.95	52.4	65.2	64.2	69.8	50.0	59.9	107	7	45	46	45	78	53	54	.362	.365	.352	23.53	2.07	7.0	5.3	5.3	4.8	5.2

OMAHA, NEBR.¹[$\phi=41^{\circ}18' N.$; $\lambda=95^{\circ}54' W.$]

January	29.05	29.48	28.32	7.0	14.4	14.1	21.6	0.3	11.0	42	-18	4	8	9	84	72	80	0.057	0.064	0.070	1.15	0.68	14.1	4.0	4.3	4.5	4.8
February	28.96	29.68	28.17	18.0	25.1	26.2	30.8	13.6	22.2	46	-7	14	16	18	82	65	71	.086	.093	.106	.22	.11	2.1	4.3	5.4	4.6	5.5
March	29.05	29.41	28.09	29.2	39.7	39.2	44.3	26.6	35.4	74	12	26	27	28	86	61	66	.141	.153	.165	1.60	.78	3.5	5.5	7.2	6.4	6.9
April	28.81	29.25	28.32	42.5	54.0	55.3	59.2	40.6	49.9	85	30	36	37	37	80	58	55	.222	.229	.230	1.67	.63	.2	6.7	6.8	6.8	6.7
May	28.89	29.20	28.53	55.6	70.6	71.3	75.0	53.3	64.2	89	37	50	52	52	84	53	54	.377	.403	.413	2.45	.92	.0	6.2	6.0	4.9	5.6
June	28.88	29.21	28.49	64.0	78.2	78.6	82.6	61.8	72.2	104	46	58	57	58	83	50	52	.510	.487	.514	4.77	2.21	.0	6.7	5.8	4.6	5.8
July	28.90	29.12	28.60	70.6	86.2	86.6	90.9	68.3	79.6	100	60	62	62	62	77	47	46	.573	.572	.564	5.04	1.93	.0	3.6	3.8	2.7	3.6
August	28.91	29.19	28.61	72.1	87.9	88.5	93.0	70.1	81.6	103	59	66	67	67	80	51	50	.635	.667	.670	.97	.48	.0	4.0	3.4	2.1	3.1
September	28.98	29.38	28.68	58.0	76.8	75.3	82.0	55.7	68.8	100	37	51	49	49	78	39	42	.394	.380	.378	.80	.70	.0	3.0	2.9	3.6	3.4
October	28.98	29.58	28.50	44.9	58.7	56.7	63.7	42.0	52.8	90	22	38	38	39	76	49	54	.246	.249	.255	1.43	.76	T	4.3	5.1	3.7	4.6
November	29.05	29.56	28.39	30.3	41.4	39.8	45.9	26.4	36.2	74	-3	24	25	25	76	53	55	.136	.146	.142	.26	.13	1.7	4.3	5.8	4.7	5.6
December	29.07	29.44	28.63	20.9	29.8	29.5	36.1	17.7	26.9	59	-2	16	20	20	82	66	67	.099	.117	.118	.15	.07	.8	4.2	6.7	4.1	5.9
Year	28.96	29.68	28.09	42.8	55.2	55.1	60.4	39.7	50.1	104	-18	37	38	39	81	55	58	.290	.297	.302	20.51	2.21	22.4	4.7	5.3	4.4	5.1

OSWEGO, N. Y.

[$\phi=43^{\circ}29' N.$; $\lambda=76^{\circ}35' W.$]

January	29.83	30.52	29.13	30.0	33.4	32.7	39.3	25.1	32.2	62	9	24	25	25	78	70	70	0.138	0.145	0.138	3.44	0.62	6.8	9.0	8.2	7.3	8.4
February	29.59	30.18	28.92	25.9	29.8	30.1	34.9	22.6	28.8	51	6	20	21	21	78	69	68	.112	.116	.115	3.37	1.68	13.1	8.5	8.0	6.9	7.8
March	29.57	30.11	29.11	25.4	28.8	29.7	33.3	22.5	27.9	42	10	19	21	22	75	70	70	.104	.113	.117	3.62	.58	33.5	7.3	7.8	6.6	7.3
April	29.62	30.10	29.18	40.8	44.6	44.5	50.1	36.5	43.3	65	29	32	32	32	72	65	67	.187	.187	.191	2.37	.70	3.6	7.0	5.9	6.5	6.7
May	29.59	30.04	29.28	53.5	58.0	56.4	63.8	46.7	55.2	85	39	45	44	44	74	63	67	.305	.298	.303	2.54	.60	.0	6.3	5.3	6.4	5.8
June	29.55	29.87	29.19	63.9	66.8	66.5	72.3	57.5	64.9	82	59	56	56	55	77	70	68	.455	.453	.444	3.22	.77	.0	6.6	5.8	7.3	6.3
July	29.58	29.78	29.23	69.5	75.0	73.8	79.3	63.2	71.2	90	52	61	60	61	74	61	67	.538	.539	.546	1.33	.50	.0	4.7	4.6	5.5	5.0
August	29.68	29.93	29.29	68.8	77.0	73.4	80.7	64.8	72.8	90	53	63	64	65	80	65	74	.591	.599	.616	3.04	1.27	.0	4.5	5.6	5.6	5.9
September	29.68	30.18	29.07	56.7	64.5	61.6	68.6	52.1	60.4	90	41	50	50	51	78	61	69	.380	.388	.392	.98	.45	.0	5.3	6.1	5.0	6.0
October	29.63	30.25	28.92	46.9	51.8	49.9	56.0	43.0	49.5	86	29	39	40	39	76	66	68	.256	.265	.263	6.35	1.89	.8	8.4	7.9	7.5	8.3
November	29.64	30.22	29.06	38.4	42.6	41.4	46.1	34.5	40.3	66	25	30	31	31	72	63	67	.174	.178	.183	2.71	.81	1.2	9.5	9.1	8.5	9.0
December	29.71	30.24	28.95	26.5	28.6	28.9	33.5	22.6	28.0	44	8	20	22	21	77	74	71	.114	.118	.114	2.86	.81	20.3	8.6	8.3	7.7	8.5
Year	29.64	30.52	28.92	45.6	50.1	49.1	54.8	40.9	47.9	90	6	38	39	39	76	66	69	.280	.283	.285	35.83	1.89	79.3	7.1	6.9	6.7	7.1

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

NORTH PLATTE, NEBR.

[H=2,807 ft.; H_b=2,821 ft.; h_r=11 ft.; h_r=4 ft.; h_a=51 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from																							
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
	Mi.		Mi.																										
January	7.7	W.	23	NW.	0	15	2	6	4	4	7	14	8	2	14	8	9	11	6	15	11	0	14	0	22	0	31	0	0
February	7.7	W.	29	NW.	0	11	2	2	6	4	1	16	11	3	11	8	9	5	1	9	5	0	7	1	9	0	28	0	0
March	8.7	N.	32	N.	1	11	12	6	5	9	4	6	7	2	6	9	16	7	4	11	5	1	7	0	6	0	28	2	0
April	9.9	N.	31	N.	0	15	6	3	9	4	4	4	13	2	6	10	14	4	3	1	1	0	5	0	0	9	2	0	0
May	9.2	S.	24	N.	0	11	10	4	12	12	1	5	7	0	8	9	14	9	7	0	0	1	3	0	0	1	0	5	0
June	7.9	SE.	28	NW.	0	4	13	7	13	6	2	9	6	0	9	10	11	8	7	0	0	0	7	2	0	8	0	6	0
July	7.2	SE.	25	NW.	0	6	6	15	12	9	2	4	5	3	18	13	0	11	8	0	0	0	0	0	0	23	0	14	0
August	7.4	S.	32	NE.	1	10	4	1	13	18	5	4	6	1	21	8	2	7	6	0	0	0	2	0	0	25	0	9	0
September	7.0	S.	26	N.	0	9	4	7	10	17	1	7	3	2	18	5	7	8	7	0	0	0	3	0	0	6	0	4	0
October	7.4	W.	26	N.	0	9	4	8	11	5	2	14	9	0	16	7	8	5	4	1	0	0	3	0	0	0	1	0	0
November	7.6	W.	32	NW.	1	7	5	2	11	6	5	10	12	2	11	7	12	4	0	9	4	0	3	0	6	0	25	0	0
December	7.4	W.	22	N.	0	11	4	2	6	7	5	16	11	0	14	10	7	4	2	7	3	0	7	1	8	0	31	0	0
Year	7.9	W.	32	NW.	3	119	72	63	112	101	39	109	98	17	152	104	109	83	55	53	29	2	61	4	51	63	153	42	0

OKLAHOMA CITY, OKLA.

[H=1,254 ft.; H_b=1,214 ft.; h_r=10 ft.; h_r=3 ft.; h_a=47 ft.]

January	10.8	N.	26	N.	0	24	1	4	6	16	5	0	6	0	6	5	20	13	9	12	5	0	21	8	10	0	29	2	0
February	11.6	S.	33	NW.	1	18	6	2	1	20	1	0	8	0	9	8	11	4	2	4	0	5	0	2	0	16	1	0	0
March	11.2	N.	34	SW.	1	23	4	1	10	12	4	3	5	0	13	5	13	6	4	6	3	0	7	0	0	12	3	0	0
April	11.9	SE.	30	NW.	0	14	1	2	6	24	2	2	8	1	15	6	9	5	4	0	0	0	1	0	0	1	4	0	0
May	10.1	SE.	27	SW.	0	9	4	4	13	23	2	4	3	0	9	12	10	11	8	0	0	0	2	1	0	2	0	12	0
June	9.0	S.	26	SW.	0	9	6	4	8	31	2	0	0	0	13	10	7	9	7	0	0	1	4	0	0	13	0	9	0
July	10.1	S.	23	S.	0	1	4	3	10	42	2	0	0	0	11	15	5	7	4	0	0	0	1	1	0	26	0	6	0
August	8.5	S.	24	NW.	0	1	3	4	10	40	3	0	0	1	11	14	6	8	6	0	0	0	1	0	0	26	0	11	2
September	8.7	S.	24	S.	0	9	6	8	10	23	1	1	2	0	14	10	6	8	0	0	0	0	2	0	0	10	0	7	0
October	8.6	S.	25	NW.	0	12	5	3	5	25	3	3	5	1	18	3	10	7	5	0	0	0	9	1	0	3	0	3	1
November	10.1	S.	27	N.	0	16	7	3	3	20	0	3	8	0	10	7	13	6	5	5	0	0	7	0	3	0	14	1	0
December	9.3	N.	24	S.	0	26	3	1	5	16	4	1	6	0	5	9	17	8	4	4	0	0	15	6	5	0	17	0	0
Year	10.0	S.	34	SW.	2	162	50	39	87	292	29	17	51	3	134	104	127	92	64	31	10	1	75	17	20	81	89	59	3

OMAHA, NEBR.¹[H=978 ft.; H_b=982 ft.; h_r=31 ft.; h_r=3 ft.; h_a=44 ft.]

January	12.3	NW.	41	NW.	3	13	1	6	8	12	3	1	16	2	14	8	9	8	7	15	8	0	9	1	25	0	31	0	0	0
February	13.0	NW.	42	NW.	4	11	2	2	8	8	2	3	19	1	10	6	12	5	2	13	4	0	2	0	13	0	28	0	0	0
March	11.0	N.	38	E.	5	19	3	7	10	11	1	3	7	1	6	8	17	10	5	13	4	0	8	3	5	0	25	0	1	0
April	14.4	NW.	54	NW.	6	12	5	6	10	6	2	3	16	0	10	4	16	10	7	3	1	1	1	6	0	0	5	2	0	0
May	11.6	S.	34	NW.	4	10	2	5	17	12	6	1	9	0	8	13	10	11	7	0	0	0	1	0	0	0	0	4	1	0
June	10.3	SE.	34	SW.	1	13	4	3	17	9	1	11	2	0	9	10	11	9	8	0	0	0	3	0	0	8	0	9	0	0
July	8.5	SE.	39	NW.	3	8	2	6	22	18	0	2	3	1	20	7	4	6	6	0	0	1	0	0	0	16	0	7	0	0
August	10.3	SE.	41	NW.	3	5	1	3	30	18	1	0	4	0	20	11	0	6	5	0	0	0	1	0	0	24	0	8	2	0
September	9.9	S.	34	S.	1	9	1	5	15	17	1	0	9	3	16	9	5	5	4	0	0	0	1	0	0	7	0	5	1	0
October	9.3	SE.	35	NW.	2	14	1	0	15	11	3	4	13	1	13	10	8	7	6	1	0	0	7	1	0	1	5	1	3	0
November	11.5	NW.	36	NW.	3	9	0	3	8	16	3	2	18	1	11	6	13	4	3	6	3	0	2	0	8	0	17	1	0	0
December	11.1	NW.	39	NW.	3	6	5	3	14	13	0	2	18	1	10	7	14	6	1	11	2	0	17	6	13	0	30	0	0	0
Year	11.1	NW.	54	NW.	38	129	27	49	174	151	23	32	134	11	147	99	119	87	61	62	22	2	57	11	64	56	141	37	8	0

OSWEGO, N. Y.

[H=292 ft.; H_b=335 ft.; h_r=71 ft.; h_r=69 ft.; h_a=85 ft.]

January	11.8	S.	27	S.	0	4	2	4	16	16	6	8	6	0	2	6	23	18	14	11	7	0	2	0	7	0	27	0	0	0
February	11.5	SE.	28	W.	0	2	5	2	15	10	8	3	11	0	3	4	21	13	11	16	10	0	0	0	14	0	24	1	0	0
March	11.8	W.	29	W.	0	5	8	2	7	7	8	11	14	0	6	5	20	19	16	21	19	0	0	0	12	0	29	0	0	0
April	10.8	SE.	28	SE.	0	9	4	8	13	9	3	9	5	0	7	6	17	14	9	5	3	0	1	0	0	7	0	1	0	0
May	7.7	W.	21	N.	0	8	0	4	7	12	14	14	2	1	9	10	12	16	12	0	0	0	4	2	0	0	0	2	1	0
June	6.7	W.	25	N.	0	13	3	1	6	7	11	15	3	1	9	9	12	10	10	0	0	0	8	0	0	0	0	1	0	0
July	7.1	S.	22	N.	0	8	1	4	6	15	10	14	4	0	14	8	9	8	6	0	0	0	16	0	0	0	0	6	0	0
August	6.5	S.	22	SW.	0	6	6	3	15	16	4	8	3	1	11	9	11	9	5	0	0	0	8	1	0	1	0	6	2	0
September	8.9	S.	27	N.	0	6	4	1	17	15	5	5	6	1	8	11	11	9	6	0	0	1	11	5	0	0	2	0	0	0
October	10.8	S.	27	NW.	0	3	3	2	17	16	4	3	14	0	2	4	25	19	18	5	2	1	7	1	0	0	2	1	0	0
November	11.0	S.	32	SE.	1	2	2	0	8	26	7	6	9	0	1	3	26	18	12	7	4	0	14	0	0	0	11	1	0	0
December	10.4	S.	30	W.	0	2	4	5	12	17	7	5	10	0	1	6	24	18	14	20	13	0	12	2	11	0	26	0	0	0
Year	9.6	S.	32	SE.	1	68	42	36	139	166	87	101	87	4	73	81	211	167	133	85	58	2	83	11	44	1	126	20	4	0

¹ Observations taken at airport.

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

PALESTINE, TEX.

[$\phi=31^{\circ}45'$ N.; $\lambda=95^{\circ}40'$ W.]

Month	Pressure			Temperature								Moisture															
	Extremes			Mean					Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness						
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	"	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	
January	29.52	29.94	29.12	44.9	48.3	48.3	54.9	38.9	46.9	73	24	42	43	43	91	84	84	0.301	0.303	0.306	4.88	0.99	0.0	8.3	9.2	8.5	9.1
February	29.55	30.04	29.00	45.8	54.7	56.2	60.8	41.0	50.9	78	30	38	39	36	76	58	50	.258	.263	.233	1.59	.72	T	6.0	6.8	4.8	6.0
March	29.54	29.87	29.06	47.2	56.3	58.1	61.9	44.1	53.0	77	30	41	42	42	81	62	60	.278	.288	.288	4.92	2.08	.5	6.2	5.7	5.9	5.9
April	29.41	29.75	29.02	57.2	70.6	73.0	76.2	55.6	65.9	89	38	53	54	52	86	56	51	.427	.438	.424	1.40	.57	.0	5.6	5.3	3.3	5.0
May	29.44	29.66	29.22	65.5	80.1	82.0	85.1	63.7	74.4	91	55	61	59	57	86	48	43	.556	.502	.474	1.68	.26	.0	5.8	4.0	3.4	4.2
June	29.42	29.64	29.04	73.9	85.7	88.0	90.9	71.8	81.4	98	62	70	67	66	87	55	51	.730	.658	.653	2.76	1.26	.0	5.5	5.1	3.1	4.7
July	29.48	29.62	29.34	74.7	88.1	89.4	93.7	73.2	83.4	99	69	70	68	65	86	52	47	.737	.678	.627	1.62	1.39	.0	4.4	4.3	4.1	4.5
August	29.46	29.67	29.29	74.9	89.9	88.5	95.1	74.1	84.6	102	68	71	68	67	88	49	52	.761	.685	.665	1.58	.39	.0	3.8	4.6	4.6	4.5
September	29.49	29.75	29.32	68.6	83.6	81.9	87.6	67.7	77.6	98	53	62	61	61	82	49	51	.591	.562	.512	3.07	1.50	.0	4.0	3.4	3.8	4.0
October	29.50	29.81	29.07	58.9	72.8	71.9	77.4	57.5	67.4	91	34	52	52	51	80	50	51	.422	.414	.400	1.86	1.04	.0	4.2	2.8	2.0	3.4
November	29.60	30.08	29.12	47.4	58.5	56.4	63.1	44.4	53.8	82	25	41	42	42	79	57	62	.293	.305	.304	5.85	5.10	4.8	6.1	5.3	4.9	5.5
December	29.60	29.97	29.01	46.6	52.9	52.4	56.8	43.7	50.2	71	21	41	42	42	81	70	71	.298	.313	.312	6.88	4.92	.0	7.7	7.6	7.7	7.9
Year	29.50	30.08	29.00	58.8	70.1	70.5	75.3	56.3	65.8	102	21	54	53	52	84	58	56	.471	.451	.433	37.09	5.10	5.3	5.6	5.3	4.7	5.4

PARKERSBURG, W. VA.

[$\phi=39^{\circ}16'$ N.; $\lambda=81^{\circ}36'$ W.]

January	29.55	30.02	28.98	38.2	43.2	43.7	50.7	33.1	41.9	71	24	34	36	36	87	77	75	0.209	0.226	0.228	8.99	1.39	2.0	8.2	9.0	7.1	8.4
February	29.41	29.95	28.63	30.7	37.0	36.6	43.0	26.7	34.8	76	14	26	28	26	82	70	67	.148	.165	.151	2.58	.91	3.6	7.7	8.0	5.9	7.2
March	29.41	29.79	28.83	32.8	42.8	42.0	48.2	30.0	39.1	73	17	28	29	30	85	59	62	.160	.177	.168	1.36	.43	11.6	6.2	5.7	5.9	5.9
April	29.33	29.85	28.82	47.0	58.7	56.2	64.1	42.7	53.4	85	29	39	38	38	76	49	54	.249	.242	.251	2.19	.52	.1	7.0	6.5	6.7	7.0
May	29.38	29.67	29.08	56.6	71.3	67.6	75.0	51.5	63.2	92	39	50	49	51	80	48	59	.376	.371	.388	3.49	.93	.0	4.0	5.5	5.7	5.2
June	29.31	29.64	28.85	66.6	78.4	75.6	82.5	62.5	72.5	92	52	62	60	62	86	56	65	.566	.531	.569	5.35	2.17	.0	5.3	6.7	6.0	6.5
July	29.33	29.55	29.14	68.4	81.6	78.3	85.2	63.8	74.5	94	52	63	62	64	83	52	64	.586	.565	.566	3.26	1.29	.0	3.5	4.8	4.8	4.8
August	29.38	29.60	29.19	70.2	82.3	79.7	86.1	67.4	76.8	94	60	66	66	67	87	59	65	.645	.636	.655	3.58	1.27	.0	5.7	5.5	4.9	5.5
September	29.40	29.78	29.00	56.1	72.1	67.6	76.1	53.1	64.6	92	36	52	52	56	88	52	66	.417	.420	.465	1.30	1.12	.0	3.0	4.6	4.2	4.0
October	29.36	29.86	28.82	48.1	58.2	54.7	61.7	45.3	53.5	86	28	43	42	44	82	59	67	.293	.295	.308	3.67	.98	.2	6.2	7.2	5.4	6.8
November	29.44	30.03	28.77	37.2	46.2	43.1	50.1	33.0	41.6	69	17	30	32	32	76	59	67	.176	.192	.193	1.16	.41	2.3	6.0	7.5	5.9	7.0
December	29.47	29.90	28.84	30.0	35.8	34.5	40.7	26.6	33.6	58	2	26	28	29	85	73	79	.155	.165	.170	3.14	1.10	6.5	7.4	7.7	6.5	7.6
Year	29.40	30.03	28.63	48.5	59.0	56.6	63.6	44.6	54.1	94	2	43	44	45	83	59	66	.332	.332	.347	40.07	2.17	26.3	5.8	6.6	5.8	6.3

PENSACOLA, FLA.

[$\phi=30^{\circ}25'$ N.; $\lambda=87^{\circ}13'$ W.]

January	30.06	30.28	29.86	62.0	64.8	64.2	67.5	59.0	63.2	76	46	60	60	61	93	86	90	0.535	0.540	0.557	2.17	0.68	0.0	7.3	6.3	6.0	6.9
February	30.03	30.45	29.68	50.8	57.1	57.3	61.8	47.0	54.4	72	32	47	49	51	86	75	81	.348	.371	.395	3.79	1.83	.0	6.0	5.7	5.8	5.8
March	30.00	30.38	29.68	51.6	60.1	60.5	64.4	49.4	56.9	76	32	48	52	54	87	76	81	.357	.411	.438	4.30	2.34	.0	4.5	4.7	4.6	4.6
April	29.94	30.37	29.62	62.5	68.6	68.1	71.6	60.2	65.9	85	47	58	59	60	86	75	78	.509	.531	.544	17.03	10.58	.0	3.6	4.7	4.3	4.2
May	29.94	30.08	29.69	71.3	78.0	76.9	80.5	69.9	75.2	90	61	66	64	66	83	65	69	.640	.625	.638	6.46	5.99	.0	2.9	3.1	3.0	3.1
June	29.93	30.13	29.59	76.7	82.0	81.0	85.2	73.9	79.6	92	67	72	70	71	85	70	72	.779	.748	.757	8.98	3.65	.0	4.0	4.7	5.3	4.8
July	29.98	30.16	29.79	77.9	83.7	82.5	86.8	74.8	80.8	93	68	72	71	72	81	67	71	.779	.770	.785	3.50	1.14	.0	3.4	4.5	5.1	4.5
August	29.96	30.15	29.78	77.5	82.6	81.4	85.1	75.3	80.2	89	71	73	73	73	88	73	75	.821	.812	.802	13.31	3.36	.0	4.7	5.9	7.2	6.2
September	29.95	30.21	29.71	71.9	79.3	77.6	82.2	70.0	76.1	92	59	67	67	67	86	67	71	.684	.670	.675	13.05	5.18	.0	4.6	4.4	4.9	4.9
October	29.95	30.18	29.69	63.2	71.4	70.0	74.4	60.3	67.4	91	38	58	58	60	84	65	73	.524	.520	.566	9.66	5.12	.0	4.2	3.9	3.4	4.2
November	30.04	30.50	29.60	52.0	59.3	57.9	63.2	48.3	55.8	74	27	45	46	47	78	64	70	.335	.351	.364	2.82	1.12	.0	4.1	5.0	4.0	4.6
December	30.11	30.33	29.67	48.0	55.7	54.2	58.9	45.0	52.0	69	21	43	46	46	82	72	76	.305	.345	.348	2.51	.99	.0	5.3	4.4	4.7	4.8
Year	29.99	30.50	29.50	63.8	70.2	69.3	73.5	61.1	67.3	93	21	59	60	61	85	71	76	.551	.558	.572	87.58	10.58	.0	4.6	4.8	4.9	4.9

PEORIA, ILL.

[$\phi=40^{\circ}43'$ N.; $\lambda=89^{\circ}36'$ W.]

January	29.48	29.89	28.73	20.8	27.5	25.9	32.3	15.4	23.8	47	-8	18	22	22	88	78	82	0.107	0.125	0.122	2.86	1.33	4.7	5.4	6.0	5.8	5.9
February	29.35	30.04	28.50	24.1	29.4	29.0	36.5	19.2	27.8	54	1	20	21	22	84	69	75	.118	.120	.127	2.46	1.51	2.0	4.9	5.6	4.3	5.1
March	29.44	29.74	28.75	29.9	40.3	39.5	44.5	27.9	36.2	66	18	26	30	30	86	65	68	.146	.169	.174	1.02	.39	1.2	5.1	5.4	5.2	5.3
April	29.23	29.74	28.70	44.2	53.8	53.5	58.6	40.8	49.7	81	28	39	42	42	84	66	67	.255	.281	.282	4.42	1.50	T	6.7	7.3	5.8	6.7
May	29.33	29.60	29.08	56.5	69.6	68.3	73.4	52.9	63.2	92	42	51	52	52	83	54	58	.394	.404	.405	3.22	1.08	.0	4.4	5.2	4.2	4.2
June	29.30	29.67	29.00	64.3	77.1	76.4	81.0	60.5	70.8	99	45	60	61	61	86	60	61	.534	.554	.557	4.87	2.68	.0	5.2	4.6	4.4	4.5
July	29.33	29.52	29.05	68.4	83.7	82.6	87.1	64.6	75.8	95	51	63	62	63	82	51	52	.582	.575	.585	2.32	1.29	.0	3.3	3.9	2.6	3.1
August	29.38	29.56	29.14	69.7	85.6	81.9	89.3	67.3	78.3	99	56	64	67	67	84	55	63	.606	.661	.674	1.65	.77	.0	3.2	4.0	2.5	3.2
September	29.42	29.69	29.03	55.8	75.0	69.2	75.8	53.2	65.8	94	34	51	53	53	84	47	57	.405	.430	.426	1.14	.70	.0	2.6	2.4	2.2	2.7
October	29.38	29.89	28.64	44.5	57.9	54.2	61.8	42.5	52.2	89	23	40	39	40	85	53	67	.273	.269	.274	2.69	1.30	T	4.6	5.3	4.8	5.3
November	29.44	30.03	28.89	30.4	42.5	38.8	45.9	27.5	36.7	81	4	25	29	29	81	59	67	.146	.168	.170	1.28	.44	4.1	4.3	3.9	3.5	3.9
December	29.47	29.88	29.06	24.8	29.0	28.5	32.2	21.3	26.8	53	4	22	24	25	88	82	85	.129	.138	.140	2.06	.82	.8	7.5	7.5	6.5	7.4
Year	29.38	30.04	28.50	44.4	56.0	54.0	60.2	41.1	50.6	99	-8	40	42	42	85	62	66	.308	.324	.328	29.89	2.68	12.8	4.8	5.1	4.4	4.8

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

PALESTINE, TEX.

[H=491 ft.; H_b=510 ft.; h_t=64 ft.; h_r=57 ft.; h_a=72 ft.]

Month	Wind														Number of days														
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from																							
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Trail	Light	Dense	32° or below	90° or above	Minimum temperature 32° or below	Thunderstorm	Aurora
January	7.8	N.	25	S.	0	14	11	10	3	7	5	3	9	0	2	3	26	20	20	0	0	0	10	12	3	0	9	1	0
February	9.8	S.	30	NW.	0	14	11	3	1	17	6	1	3	0	9	6	13	7	7	2	0	0	1	1	0	0	3	1	0
March	8.7	N.	21	S.	0	17	11	22	8	14	4	1	5	0	12	4	15	13	11	1	1	1	3	1	0	0	3	7	0
April	9.2	S.	25	NW.	0	6	3	1	4	34	3	3	6	0	11	11	8	7	4	0	0	0	2	2	0	0	0	7	0
May	8.0	S.	20	S.	0	9	1	4	8	26	8	3	1	2	10	19	2	5	5	0	0	0	1	0	0	2	0	6	0
June	6.8	S.	23	S.	0	2	4	4	3	24	11	6	5	1	10	16	4	5	5	0	0	0	1	0	0	22	0	8	0
July	7.5	S.	25	S.	0	0	3	2	9	29	17	1	1	0	11	15	5	5	4	0	0	0	0	0	0	28	0	9	0
August	6.5	S.	22	NE.	0	1	8	12	9	22	8	1	0	1	11	17	3	9	6	0	0	0	2	0	0	30	0	9	0
September	5.7	S.	17	S.	0	6	9	13	4	18	4	1	1	1	15	7	2	5	5	0	0	0	2	0	0	12	0	7	0
October	7.2	S.	23	NW.	0	12	14	4	4	15	7	2	2	2	18	8	5	4	4	0	0	0	4	4	0	4	0	1	0
November	7.3	S.	24	NW.	0	16	6	9	4	15	0	2	8	0	9	8	13	8	7	2	2	0	4	0	0	7	2	0	0
December	7.0	S.	20	N.	0	10	11	7	11	13	2	2	6	0	4	5	22	16	6	0	0	0	11	3	0	0	6	1	0
Year	7.6	S.	30	NW.	0	107	92	71	68	234	75	29	47	7	122	119	124	104	84	5	3	1	41	23	3	98	28	58	0

PARKERSBURG, W. VA.

[H=615 ft.; H_b=637 ft.; h_t=77 ft.; h_r=69 ft.; h_a=84 ft.]

January	7.1	SE.	28	NW.	0	8	8	1	21	3	6	3	12	0	2	6	23	20	18	2	2	0	12	2	1	0	15	0	0
February	8.2	SW.	30	SW.	0	2	4	2	14	3	17	3	11	0	2	10	16	15	8	14	9	1	2	0	5	0	21	3	0
March	7.4	NW.	28	SW.	0	7	5	0	2	9	7	17	15	0	10	7	14	10	7	9	6	0	7	0	5	0	18	2	0
April	7.9	SE.	26	NW.	0	1	11	2	11	7	9	4	15	0	4	6	20	15	9	2	1	0	4	0	0	0	3	1	0
May	5.6	NW.	26	NW.	0	4	2	3	15	4	9	6	18	1	10	12	9	15	13	0	0	0	8	0	0	1	0	5	0
June	5.4	NW.	35	NW.	1	3	4	2	10	7	12	4	18	0	3	15	12	15	12	0	0	0	13	6	0	1	0	11	0
July	5.1	SE.	24	SW.	0	4	5	5	14	12	9	7	4	2	10	16	5	12	8	0	0	0	13	6	0	8	0	10	0
August	4.6	SE.	20	NW.	0	13	11	3	13	2	5	2	8	5	12	6	13	8	6	0	0	0	23	1	0	6	0	9	0
September	4.9	SE.	19	NW.	0	7	7	3	21	2	3	3	7	7	11	16	3	6	4	0	0	0	20	5	0	4	0	3	0
October	6.9	SE.	21	NW.	0	4	3	2	21	8	7	1	14	2	8	6	17	16	11	1	1	0	8	1	0	0	2	1	0
November	6.4	SW.	27	SW.	0	2	4	1	17	4	17	7	3	5	6	6	18	14	9	6	3	0	12	1	3	0	15	1	0
December	6.1	SW.	20	NW.	0	4	4	2	14	11	9	6	10	2	6	4	21	14	11	7	5	0	10	2	8	0	22	0	0
Year	6.3	SE.	35	NW.	1	59	68	26	173	72	110	63	135	24	84	110	171	160	116	41	27	1	132	24	22	20	96	46	0

PENSACOLA, FLA.

[H=11 ft.; H_b=56 ft.; h_t=149 ft.; h_r=131 ft.; h_a=185 ft.]

January	13.8	SE.	29	SE.	0	9	11	11	20	7	2	1	1	0	2	19	10	15	8	0	0	0	8	7	0	0	0	1	0
February	13.9	N.	52	S.	4	11	15	4	3	6	5	1	10	1	7	10	11	11	6	0	0	0	1	1	0	0	0	1	3
March	11.6	N.	35	S.	1	13	11	4	5	3	13	4	9	0	13	11	7	11	9	0	0	0	3	3	0	0	1	4	0
April	13.6	S.	51	SE.	6	5	3	5	10	12	14	5	6	0	17	6	7	9	8	0	0	0	3	2	0	0	0	7	0
May	10.8	S.	48	SE.	2	4	6	3	3	7	20	3	15	1	19	11	1	7	5	0	0	0	0	0	0	1	0	9	0
June	10.3	SW.	51	S.	1	4	11	4	3	5	16	10	7	0	6	21	3	13	10	0	0	0	0	0	0	3	0	14	0
July	9.8	SW.	38	SW.	1	11	4	4	3	3	22	8	7	0	12	15	4	9	8	0	0	0	0	0	0	5	0	8	0
August	9.0	S.	43	E.	2	7	15	7	5	11	8	3	6	0	2	17	12	17	14	0	0	0	0	0	0	0	0	16	0
September	11.3	NE.	41	E.	3	10	25	7	2	4	8	1	2	1	12	7	11	12	10	0	0	0	0	0	0	1	0	6	0
October	12.6	NW.	40	SE.	2	8	11	6	5	5	8	4	14	1	16	7	8	13	11	0	0	0	3	3	0	1	0	1	0
November	12.4	NE.	41	S.	1	12	17	7	3	2	3	6	9	1	14	6	10	8	7	0	0	0	3	2	0	0	4	2	0
December	11.5	E.	40	S.	1	16	13	14	5	2	5	3	3	1	12	13	6	6	6	0	0	0	5	3	0	0	6	0	0
Year	11.7	N.	52	S.	24	110	142	76	67	67	124	49	89	6	132	143	90	131	102	0	0	0	26	21	0	11	12	71	0

PEORIA, ILL.

[H=602 ft.; H_b=609 ft.; h_t=11 ft.; h_r=4 ft.; h_a=45 ft.]

January	8.4	W.	27	SW.	0	7	9	3	12	6	7	10	8	0	10	5	16	9	9	9	3	0	11	5	15	0	31	0	0
February	9.8	W.	29	W.	0	3	1	3	11	5	4	21	8	0	11	8	9	7	6	16	3	0	8	3	10	0	24	2	0
March	7.8	NW.	20	NE.	0	10	11	3	3	5	10	5	15	0	9	14	8	7	6	11	2	0	9	0	4	0	22	1	0
April	8.4	SE.	23	NE.	0	11	5	6	11	8	5	5	9	0	7	6	17	16	13	2	0	1	12	0	0	0	4	5	0
May	6.5	S.	20	SW.	0	8	7	9	5	11	7	5	8	2	14	12	5	14	9	0	0	1	7	1	0	2	0	10	2
June	6.1	NE.	20	N.	0	14	10	5	4	9	6	5	7	0	12	10	8	8	6	0	0	1	6	0	0	3	0	6	0
July	4.8	SW.	18	NW.	0	3	4	4	9	16	11	5	8	2	19	9	3	6	6	0	0	0	0	0	0	9	0	9	0
August	4.8	S.	15	W.	0	4	11	6	11	22	3	0	3	2	17	10	4	9	5	0	0	0	11	0	0	16	0	9	0
September	6.0	S.	17	SW.	0	6	10	2	10	15	5	0	8	4	21	6	3	3	3	0	0	0	4	0	0	6	0	3	0
October	6.0	NW.	21	W.	0	12	3	8	6	8	4	12	7	2	12	6	13	9	5	4	0	0	15	1	0	0	8	1	4
November	8.1	S.	21	W.	0	2	3	3	3	16	5	13	14	1	20	2	8	8	7	8	4	0	10	0	8	0	16	1	0
December	7.9	W.	23	W.	0	3	5	4	9	8	11	12	10	0	4	9	18	13	8	13	3	0	21	8	15	0	29	0	0
Year	7.0	S.	29	W.	0	83	79	56	94	129	78	93	105	13	156	97	112	109	83	63	15	3	114	18	52	36	134	47	7

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

PHILADELPHIA, PA. [φ=39°57' N.; λ=75°09' W.]																												
Month	Pressura			Temperature								Moisture																
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness						
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snow fall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight	
January	In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.					
February	30.14	30.68	29.53	39.4	42.3	43.0	47.9	34.9	41.4	67	25	34	37	36	83	81	77	0.212	0.233	0.226	5.71	0.97	0.4	7.7	9.0	8.3	8.4	
March	29.88	30.28	29.28	32.2	38.2	38.0	43.0	28.7	35.8	60	20	24	26	24	70	61	57	.135	.146	.140	1.66	.45	4.1	5.7	7.1	3.4	6.0	
April	29.83	30.35	29.38	34.7	41.2	41.2	45.3	32.1	38.7	61	21	23	22	23	62	49	51	.125	.125	.132	2.98	.93	7.8	6.5	6.4	4.7	5.7	
May	29.88	30.37	29.40	46.8	55.0	52.5	59.2	43.3	51.2	80	35	36	34	35	67	49	55	.219	.211	.217	4.38	1.62	T	6.8	7.0	6.7	6.4	
June	29.87	30.31	29.52	61.1	71.0	67.1	75.2	55.4	65.3	90	46	49	48	49	66	46	56	.362	.355	.371	2.62	1.55	.0	5.0	5.2	5.4	4.8	
July	29.80	30.16	29.35	70.2	77.9	74.5	81.2	64.0	72.6	91	55	61	60	61	73	57	64	.538	.538	.538	3.51	1.02	.0	6.0	6.5	7.1	6.3	
August	29.87	30.07	29.58	73.6	81.8	78.8	85.4	68.8	77.1	98	59	63	61	63	72	52	61	.596	.558	.599	1.16	.27	.0	5.7	5.7	6.7	5.7	
September	29.96	30.21	29.70	73.1	81.5	78.3	84.8	69.6	77.2	94	60	67	66	67	83	62	70	.678	.656	.675	4.10	1.33	.0	6.1	6.0	5.7	5.5	
October	29.96	30.45	29.48	62.2	71.0	67.5	74.7	58.1	66.4	91	46	54	53	54	75	54	64	.436	.415	.442	1.55	.74	.0	4.1	4.8	3.7	4.1	
November	29.94	30.53	29.20	51.7	59.9	55.9	63.5	46.6	55.0	79	35	45	42	43	77	55	64	.323	.297	.301	5.24	1.97	.0	5.9	6.2	4.6	5.9	
December	29.97	30.53	29.33	41.8	49.6	48.1	53.4	39.0	46.2	68	27	34	33	34	72	56	59	.208	.207	.211	3.44	1.86	T	4.7	5.5	4.0	4.7	
Year	30.02	30.47	29.29	33.2	38.7	37.3	42.1	29.9	36.0	64	18	23	25	25	66	58	60	.136	.146	.139	1.05	.37	T	6.2	5.2	5.2	5.8	

PHOENIX, ARIZ. [φ=33°28' N.; λ=112°00' W.]																											
January	28.85	29.16	28.48	33.9	49.9	51.9	54.4	31.9	43.2	66	21	28	27	27	78	42	40	0.154	0.151	0.152	0.83	0.66	1.0	2.7	4.1	3.3	3.9
February	28.84	29.23	28.37	44.7	62.8	66.1	68.0	41.4	54.7	78	30	34	33	30	68	35	28	.205	.198	.175	.76	.37	.0	3.0	4.0	4.4	3.6
March	28.76	29.05	28.48	49.8	68.1	70.8	72.9	46.9	59.9	85	39	38	35	33	65	32	27	.231	.210	.194	1.58	1.14	.0	2.1	3.6	3.4	3.1
April	28.71	28.94	28.36	54.2	78.7	81.1	83.2	52.1	67.6	96	44	32	27	27	44	15	14	.185	.146	.144	T	T	.0	1.9	2.3	2.7	2.1
May	28.62	28.84	28.38	63.7	89.4	92.5	94.8	62.3	78.6	107	52	40	38	38	42	18	16	.249	.235	.236	.08	.08	.0	2.1	2.7	2.9	2.5
June	28.64	28.78	28.44	71.1	95.6	98.7	100.9	69.7	85.3	108	62	43	40	36	38	16	13	.296	.262	.232	T	T	.0	2.2	1.9	1.8	2.0
July	28.66	28.86	28.42	80.7	99.3	102.5	105.0	78.5	91.8	114	68	61	57	54	52	26	22	.540	.473	.422	.49	.25	.0	4.2	2.9	3.6	2.6
August	28.66	28.83	28.48	81.1	99.1	102.3	104.8	79.6	92.2	111	72	62	58	56	54	27	23	.567	.494	.453	.05	.03	.0	4.7	2.2	2.5	2.7
September	28.68	28.86	28.47	76.0	95.0	97.1	99.9	73.9	86.9	106	66	60	57	55	60	30	27	.537	.477	.447	1.17	.63	.0	2.7	1.8	2.7	2.2
October	28.72	28.86	28.53	60.7	85.9	87.2	91.1	58.6	74.8	90	50	44	42	44	54	23	22	.292	.280	.288	T	T	.0	4	1.7	2.0	1.6
November	28.82	29.02	28.61	49.4	72.7	72.5	77.9	46.7	62.3	90	40	33	34	39	53	25	30	.192	.203	.243	.00	.00	.0	1.8	4.1	3.5	3.1
December	28.85	29.15	28.53	47.0	65.4	65.1	69.7	44.1	56.9	77	36	37	37	39	69	38	40	.221	.231	.243	.41	.39	.0	3.5	4.0	4.4	4.2
Year	28.74	29.23	28.36	59.4	80.2	82.3	85.2	57.1	71.2	114	21	43	40	40	56	27	25	.306	.280	.269	5.37	1.14	1.0	2.6	2.9	3.1	2.8

PITTSBURGH, PA. ¹ [φ=40°21' N.; λ=79°56' W.]																											
January	28.79	29.29	28.22	35.1	39.0	38.8	45.6	29.8	37.7	66	18	31	32	32	84	77	76	0.182	0.194	0.193	7.15	1.19	2.9	8.3	8.9	7.6	8.3
February	28.61	29.11	28.00	26.4	36.0	31.7	39.1	22.1	30.6	72	12	21	25	23	81	64	70	.122	.147	.130	1.40	.39	6.0	7.9	7.6	7.1	7.4
March	28.60	29.03	28.07	29.1	39.6	36.2	42.3	26.4	34.4	62	9	24	28	25	80	65	65	.131	.160	.138	2.09	.75	8.4	6.6	5.5	6.0	6.2
April	28.58	29.03	28.17	42.7	53.8	49.4	56.8	38.7	47.8	76	29	36	40	35	76	63	62	.214	.261	.208	5.62	2.02	T	7.6	7.4	8.1	7.5
May	28.65	28.95	28.32	54.6	68.9	63.9	72.3	50.6	61.4	89	40	46	53	46	74	59	57	.320	.410	.328	2.21	.66	.0	5.7	6.1	6.7	5.9
June	28.61	28.94	28.25	65.3	75.3	73.7	79.7	60.7	70.2	91	52	58	56	57	79	53	59	.492	.463	.483	2.65	1.21	.0	5.7	6.7	6.4	6.6
July	28.67	28.90	28.40	67.0	79.1	75.0	83.6	62.2	72.9	94	50	61	60	61	81	53	63	.544	.526	.544	5.63	1.47	.0	4.7	7.6	7.4	6.1
August	28.74	28.97	28.50	68.2	80.7	76.6	84.7	65.6	75.2	93	59	64	62	64	85	55	66	.592	.558	.593	2.52	.70	.0	5.8	6.2	5.9	5.9
September	28.75	29.13	28.33	54.8	69.0	64.7	73.2	52.0	62.6	93	35	50	48	49	85	49	58	.383	.366	.371	.57	.44	.0	3.2	5.5	4.4	5.0
October	28.68	29.21	28.17	45.4	54.7	50.8	58.3	41.9	50.1	85	27	41	40	41	84	61	72	.270	.270	.283	3.73	.69	T	6.5	7.5	5.7	7.6
November	28.72	29.30	28.11	35.7	44.7	40.6	47.4	31.4	39.4	70	16	28	29	30	74	56	67	.160	.165	.174	1.10	.59	1.6	6.9	7.0	6.0	7.3
December	28.74	29.21	28.14	26.6	31.4	30.2	36.3	22.9	29.6	54	6	24	24	24	87	73	76	.136	.136	.141	2.99	1.15	4.2	7.3	7.5	6.4	7.4
Year	28.68	29.30	28.00	45.9	56.0	52.6	59.9	42.0	51.0	94	6	40	41	41	81	61	66	.296	.305	.299	37.66	2.02	23.1	6.4	7.0	6.5	6.8

POCATELLO, IDAHO [φ=42°52' N.; λ=112°36' W.]																												
January	25.38	25.76	24.96	8.1	14.5	14.1	18.9	3.0	11.0	34	-23	4	8	8	84	74	76	0.058	0.063	0.064	1.76	0.29	19.2	6.8	7.2	7.6	7.3	
February	25.42	25.82	24.72	23.5	29.6	30.3	34.6	18.1	26.4	46	-6	17	20	20	75	66	65	0.095	.108	.108	1.80	.63	15.7	6.2	7.0	7.0	6.9	
March	25.43	25.93	24.96	31.1	41.8	42.9	46.0	28.3	37.2	55	21	26	27	28	80	57	56	.138	.147	.154	1.40	.41	5.4	5.9	6.2	5.8	6.0	
April	25.41	25.73	24.82	37.3	48.8	48.7	52.8	33.8	43.3	73	23	27	28	28	68	47	49	.149	.155	.157	1.89	.60	7.2	6.2	6.8	6.4	6.5	
May	25.42	25.76	25.06	48.2	66.1	68.6	70.8	45.1	58.0	82	33	32	34	32	55	32	28	.179	.196	.184	1.05	.54	.5	4.5	4.2	3.7	4.6	4.2
June	25.46	25.64	25.18	51.6	71.2	72.6	76.0	48.9	62.4	96	36	38	39	38	62	33	31	.231	.248	.236	.37	.24	.0	4.8	5.0	6.3	4.9	
July	25.50	25.65	25.26	62.7	83.7	85.5	89.0	59.9	74.4	98	48	46	46	42	57	38	24	.317	.315	.275	1.10	.63	.0	4.2	3.9	5.2	4.5	
August	25.50	25.76	25.22	59.9	82.1	84.7	87.4	56.6	72.0	98	45	36	37	34	62	41	18	.216	.223	.201	.35	.26	.0	2.8	1.7	2.5	2.4	
September	25.51	25.86	24.17	52.7	74.4	75.1	79.0	49.1	64.0	90	32	35	37	35	62	27	26	.209	.223	.216	.62	.18	.0	2.3	3.0	2.9	2.8	
October	25.53	25.81	25.21	44.3	61.7	61.9	66.9	41.0	54.0	78	27	31	33	31	61	37	36	.175	.192	.181	.87	.38	.0	1.5	2.7	2.8	2.5	
November	25.52	25.77	25.12	36.5	44.4																							

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

PHILADELPHIA, PA.

[H=26 ft.; h_b=114 ft.; h_t=174 ft.; h_r=166 ft.; h_a=367 ft.]

Month	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds boserved from											Precipitation	Snow			Fog		Maxi- mum temp.		32°	Elec- tricity				
	Average hourly ve- locity	Prevaling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora	
January	Mi. 13.1	sw.	36	s.	2	14	10	7	3	3	12	5	8	0	2	5	24	16	14	4	1	0	15	6	0	0	11	0	0	
February	13.7	nw.	45	se.	6	11	3	4	3	4	8	3	20	0	7	7	14	10	8	4	3	0	5	3	0	0	20	0	0	
March	13.3	nw.	31	nw.	0	4	9	4	3	0	10	10	22	0	11	10	10	13	8	10	0	9	0	1	0	16	2	0		
April	15.2	nw.	40	s.	4	7	7	12	3	6	8	3	14	0	5	11	14	14	10	2	0	0	4	0	0	0	0	1	0	
May	12.0	sw.	43	sw.	2	10	5	1	1	9	20	4	12	0	13	9	9	9	9	0	0	1	4	0	0	1	0	7	2	
June	11.5	sw.	31	sw.	0	13	8	8	4	5	15	3	4	0	5	14	11	11	9	0	0	0	6	0	0	2	0	6	0	
July	10.3	sw.	29	sw.	0	12	5	4	6	9	12	10	4	0	6	16	9	11	8	0	0	0	3	0	0	0	7	0	5	0
August	10.8	sw.	44	sw.	1	10	6	6	5	10	18	2	5	0	10	8	13	12	0	0	0	0	14	0	0	5	0	8	0	
September	10.7	n.	27	s.	0	13	10	4	2	3	13	6	9	0	14	8	8	6	5	0	0	0	11	0	0	3	0	1	0	
October	13.1	nw.	36	ne.	6	5	9	7	3	10	12	5	11	0	8	9	14	13	10	0	0	0	9	0	0	0	0	1	2	
November	12.6	nw.	34	e.	4	5	3	3	3	3	12	14	17	0	13	8	9	9	4	1	0	0	7	1	0	5	0	0	0	
December	11.9	nw.	27	w.	0	14	4	3	2	4	9	7	19	0	8	8	15	6	4	4	1	0	6	0	3	0	18	0	0	
Year	12.3	sw.	45	se.	25	118	79	63	38	66	149	72	145	0	102	113	150	130	101	25	12	1	93	10	4	18	70	31	4	

PHOENIX, ARIZ.

[H=1,083 ft.; H_b=1,107 ft.; h_t=39 ft.; h_r=37 ft.; h_a=51 ft.]

January	5.2	e.	27	sw.	0	0	3	10	10	1	3	17	11	7	16	8	7	6	3	2	2	0	0	0	0	0	15	0	0
February	5.5	e.	21	sw.	0	5	3	17	5	1	2	10	12	1	16	5	7	5	5	0	0	0	0	0	0	0	1	0	0
March	6.3	e.	34	w.	1	3	0	20	5	3	2	13	11	5	20	4	7	5	3	0	0	1	0	0	0	0	0	0	0
April	6.8	e.	27	w.	0	4	2	18	2	0	6	18	8	2	24	2	4	0	0	0	0	0	0	0	0	5	0	0	0
May	6.7	w.	22	w.	0	2	6	18	2	1	1	18	13	1	21	7	3	1	1	0	0	0	0	0	0	24	0	0	0
June	6.5	e.	25	ne.	0	4	4	21	3	0	2	11	13	2	21	8	1	0	0	0	0	0	0	0	0	30	0	1	0
July	6.8	w.	32	ne.	1	1	4	11	8	3	1	20	11	3	21	8	2	5	2	0	0	0	0	0	0	31	0	8	0
August	6.1	w.	32	se.	1	4	5	12	3	2	4	21	10	1	19	10	2	2	0	0	0	0	0	0	0	31	0	9	0
September	5.6	e.	30	ne.	0	5	3	22	5	1	1	11	8	4	24	5	1	6	3	0	0	0	0	0	0	29	0	5	0
October	5.1	e.	15	w.	0	3	3	23	2	3	2	16	7	3	26	2	3	0	0	0	0	0	0	0	0	19	0	0	0
November	5.1	e.	16	w.	0	1	1	27	3	1	1	13	11	2	18	9	3	0	0	0	0	0	0	0	0	0	0	0	0
December	5.1	e.	18	ne.	0	3	3	22	7	2	5	8	11	1	15	7	9	2	1	0	0	0	0	0	0	0	0	1	0
Year	5.9	e.	34	w.	3	35	37	221	55	18	30	176	126	32	241	75	49	32	18	2	2	1	0	0	0	169	16	24	0

PITTSBURGH, PA.¹[H=1,248 ft.; H_b=1,273 ft.; h_t=39 ft.; h_r=38 ft.; h_a=54 ft.]

January	11.9	nw.	35	n.	2	6	7	7	9	13	6	7	7	0	1	8	22	18	15	6	2	0	17	4	1	0	21	0	0
February	13.0	sw.	44	nw.	2	3	6	1	4	8	13	10	11	0	4	7	17	14	7	18	12	1	5	1	9	0	24	1	0
March	12.9	nw.	41	sw.	4	4	6	2	1	4	9	10	26	0	8	9	14	12	11	17	7	1	7	1	6	0	24	3	0
April	13.3	nw.	33	sw.	2	1	11	1	13	5	7	9	13	0	4	5	21	17	11	3	2	0	14	1	0	0	4	2	0
May	9.5	nw.	35	nw.	4	6	3	3	5	6	16	5	18	0	7	16	8	13	9	0	0	0	9	0	0	0	0	6	0
June	9.2	nw.	42	nw.	1	6	6	2	5	8	9	6	18	0	4	14	12	11	7	0	0	0	14	1	0	1	0	3	0
July	8.7	sw.	42	nw.	3	3	6	6	3	14	14	9	6	1	7	12	12	14	13	0	0	2	9	5	0	6	0	14	0
August	7.7	s.	26	n.	0	7	13	3	11	14	8	3	3	0	8	13	10	13	9	0	0	0	20	0	0	8	0	6	0
September	9.0	s.	26	sw.	0	11	8	3	9	11	7	1	10	0	8	14	8	5	4	0	0	0	21	5	0	2	0	3	0
October	11.3	nw.	33	sw.	1	6	2	2	9	15	8	9	11	0	3	6	22	14	12	4	0	0	20	3	0	0	6	1	0
November	11.7	sw.	35	sw.	4	1	2	5	3	13	19	14	3	0	4	9	17	10	5	9	4	0	10	1	3	0	17	2	0
December	10.3	sw.	33	sw.	1	2	4	1	4	7	23	5	14	2	6	6	19	14	10	11	6	0	17	10	9	0	27	0	0
Year	10.7	sw.	44	nw.	24	56	74	36	76	118	139	88	140	3	64	119	182	155	113	68	33	4	163	32	28	17	123	41	0

POCATELLO, IDAHO

[H=4,468 ft.; H_b=4,478 ft.; h_t=60 ft.; h_r=52 ft.; h_a=68 ft.]

January	9.5	se.	30	sw.	0	2	2	0	16	11	10	11	10	0	5	7	19	17	11	21	17	0	7	1	30	0	31	0	0
February	11.5	se.	36	w.	1	1	1	1	17	8	10	9	9	0	5	10	13	14	7	17	13	0	4	1	8	0	28	0	0
March	8.8	sw.	34	sw.	2	8	0	0	23	8	9	7	7	0	11	6	14	11	9	10	6	1	2	0	0	0	24	1	0
April	11.1	sw.	32	sw.	1	1	0	0	17	12	16	12	2	0	7	7	16	14	10	12	9	0	0	0	0	0	14	0	0
May	9.3	w.	37	sw.	1	2	0	0	17	8	11	19	5	0	14	11	6	4	4	1	1	1	1	0	0	0	0	2	0
June	8.7	se.	38	sw.	2	4	1	0	20	10	7	12	6	0	10	12	8	6	2	0	0	0	0	0	0	3	0	3	0
July	8.5	se.	32	s.	1	4	1	1	22	11	6	9	7	1	12	12	7	7	7	0	0	0	0	0	0	16	0	8	0
August	8.9	se.	38	sw.	1	2	0	1	15	18	9	10	7	0	23	6	2	5	2	0	0	0	0	0	0	12	0	4	0
September	8.3	se.	30	sw.	0	7	0	1	21	9	7	7	8	0	19	10	1	8	5	0	0	2	0	0	0	0	1	7	0
October	8.8	se.	30	sw.	0	2	0	4	10	15	8	12	11	0	23	4	4	4	4	0	0	0	0	0	0	0	3	1	0
November	9.7	se.	29	sw.	0	1	0	0	18	12	12	12	5	0	6	9	15	10	7	6	5	0	1	0	0	0	12	1	0
December	8.2	se.	33	s.	1	1	0	1	12	12	7	10	14	5	6	7	18	9	6	8	5	0	6	0	5	0	25	1	0
Year	9.2	se.	38	sw.	10	35	5	9	208	134	112	130	91	6	141	101	123	109	74	75	56	4	21	2	43	31	138	28	0

¹ Observations taken at airport.

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

PORT ARTHUR, TEX.

[$\phi=29^{\circ}53'$ N.; $\lambda=93^{\circ}55'$ W.]

Month	Pressure			Temperature									Moisture													
	Extremes			Mean						Extremes		Dew point	Relative humidity			Vapor pressure			Precipitation			Cloudiness				
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snow fall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight		
	In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.			
January	29.99	30.31	29.66	54.7	59.6	-----	63.6	50.7	57.2	73	39	53	54	-----	94	82	-----	0.428	0.444	-----	4.43	2.31	0.0	7.6	9.1	8.5
February	30.04	30.53	29.58	52.7	58.5	-----	62.2	49.8	56.0	78	37	44	45	-----	75	64	-----	1.328	.340	-----	1.59	.80	.0	6.0	6.9	6.8
March	30.02	30.39	29.62	53.5	59.8	-----	63.5	50.2	56.8	77	35	49	48	-----	84	68	-----	.371	.368	-----	7.08	4.55	.0	7.0	6.4	6.6
April	29.92	30.31	29.52	62.5	71.5	-----	73.4	60.5	67.0	83	45	58	57	-----	87	62	-----	.511	.495	-----	.86	.54	.0	5.9	4.8	5.1
May	29.94	30.09	29.76	71.3	80.7	-----	82.2	69.8	76.0	85	59	65	62	-----	82	54	-----	.633	.572	-----	.58	.53	.0	3.0	3.0	2.9
June	29.92	30.14	29.61	78.7	86.2	83.2	88.7	75.0	81.8	95	65	73	71	72	84	61	70	.820	.757	0.781	5.90	2.15	.0	4.1	5.4	5.5
July	29.98	30.13	29.84	79.3	86.5	84.5	89.5	76.1	82.8	94	65	73	71	73	82	61	68	.821	.758	.804	2.57	1.29	.0	3.8	5.5	5.2
August	29.94	30.14	29.73	78.6	86.3	84.5	89.5	76.8	83.2	93	73	74	72	74	87	63	72	.846	.787	.841	3.22	1.10	.0	4.3	5.9	5.5
September	29.95	30.23	29.76	73.2	83.0	80.5	86.5	71.3	78.9	93	57	68	66	67	84	58	65	.702	.660	.675	3.56	1.05	.0	3.5	4.5	4.2
October	29.96	30.22	29.64	64.3	75.1	72.1	77.7	62.3	70.0	87	40	60	58	61	85	58	71	.543	.528	.582	4.65	3.86	.0	3.4	3.6	3.4
November	30.08	30.48	29.65	52.0	62.5	59.4	66.2	49.5	57.8	80	29	48	48	50	86	60	73	.370	.371	.396	2.21	.78	.0	4.5	5.3	4.2
December	30.10	30.43	29.56	50.0	57.0	-----	60.0	47.3	53.6	70	28	46	47	-----	88	72	-----	.343	.367	-----	4.08	1.25	.0	5.9	7.9	7.5
Year	29.99	30.53	29.52	64.2	72.2	-----	75.2	61.6	68.4	95	28	59	58	-----	85	64	-----	.560	.537	-----	40.73	4.55	.0	4.9	5.7	5.5

PORTLAND, MAINE

[$\phi=43^{\circ}39'$ N.; $\lambda=70^{\circ}15'$ W.]

January	30.12	30.78	29.36	27.6	32.6	33.7	39.1	24.0	31.6	55	10	20	22	25	70	65	71	0.118	0.149	0.145	4.64	1.45	5.6	5.5	5.8	5.0	5.9
February	29.81	30.26	28.89	26.6	32.9	31.8	36.9	23.9	30.4	55	12	18	21	21	67	60	63	.101	.119	.120	3.17	1.61	1.5	4.4	4.6	4.2	4.5
March	29.70	30.26	29.03	27.2	34.6	32.5	38.6	24.0	31.3	47	12	16	19	18	60	53	54	.093	.111	.103	5.68	3.67	11.3	3.7	4.7	3.9	4.3
April	29.90	30.46	29.37	40.9	47.0	43.5	50.4	36.3	43.4	66	28	32	32	31	72	60	63	.184	.187	.175	5.75	1.79	5.7	5.1	5.4	4.5	5.5
May	29.83	30.29	29.47	54.6	60.2	56.2	64.3	48.1	56.2	96	39	44	44	43	70	62	65	.292	.299	.286	5.58	2.43	.0	4.3	5.7	4.9	5.1
June	29.79	30.23	29.30	62.9	67.3	63.1	70.3	57.2	63.8	95	53	54	54	53	74	65	74	.416	.417	.417	3.95	1.33	.0	5.6	5.7	5.5	5.3
July	29.83	30.06	29.33	69.3	75.8	71.1	78.5	62.6	70.6	98	56	60	60	60	72	60	69	.514	.526	.528	.95	.37	.0	3.7	4.0	3.5	3.5
August	29.93	30.23	29.57	69.6	77.6	71.3	80.8	64.1	72.4	96	55	62	62	61	78	61	73	.567	.577	.559	.95	.44	.0	3.3	3.8	2.6	3.7
September	29.92	30.39	29.33	57.6	66.5	60.6	69.1	52.9	61.0	96	41	50	51	50	75	59	71	.374	.389	.381	3.99	3.10	.0	2.6	3.3	3.0	3.4
October	29.90	30.53	29.20	46.4	54.1	50.7	56.4	42.4	49.4	70	31	40	39	38	80	60	64	.267	.252	.255	5.16	1.60	T	4.5	4.1	5.1	4.8
November	29.88	30.39	29.29	37.6	44.2	41.2	47.3	33.7	40.5	63	22	31	31	29	76	62	62	.180	.182	.167	5.77	2.65	.9	5.1	5.6	5.4	5.5
December	29.95	30.51	28.97	23.8	29.0	27.3	33.0	20.9	27.0	46	5	17	18	17	76	63	62	.101	.102	.096	4.18	2.16	10.5	4.0	4.2	3.4	4.2
Year	29.88	30.78	28.89	45.3	51.8	48.6	55.4	40.8	48.1	98	5	37	38	37	72	61	66	.267	.276	.269	49.77	3.67	35.5	4.3	4.7	4.2	4.6

PORTLAND, OREG.

[$\phi=45^{\circ}32'$ N.; $\lambda=122^{\circ}40'$ W.]

January	29.93	30.40	29.39	28.6	32.1	32.3	34.4	25.4	29.9	44	14	21	22	23	71	67	68	0.120	0.127	0.132	6.02	2.08	18.0	6.1	6.0	6.7	6.5	
February	29.81	30.19	29.19	38.8	44.1	45.1	47.0	36.5	41.8	60	19	35	36	36	87	76	72	.208	.216	.214	6.34	1.59	15.9	8.4	8.9	9.3	9.2	
March	29.80	30.24	29.28	45.3	52.1	54.7	56.1	43.3	49.7	66	36	40	40	39	82	66	68	.249	.251	.241	2.81	.93	.0	7.8	8.9	8.5	8.6	
April	29.90	30.26	29.39	44.9	53.4	54.3	57.1	43.0	50.0	67	38	40	39	40	83	60	62	.250	.242	.254	6.22	1.96	.0	8.2	8.8	8.9	8.9	
May	29.89	30.26	29.49	50.1	62.3	67.1	68.4	48.5	58.4	84	39	43	44	44	78	52	45	.283	.287	.288	1.06	.38	.0	5.2	5.7	5.3	5.7	
June	29.82	30.12	29.45	56.9	69.6	72.4	74.8	56.1	65.4	92	47	51	51	52	83	56	53	.383	.384	.393	3.88	1.05	.0	6.7	6.0	5.8	6.4	
July	29.90	30.12	29.64	59.4	71.6	77.2	78.5	58.4	68.4	89	50	53	54	56	80	55	48	.407	.407	.426	.444	.20	.10	.0	4.5	3.6	3.3	4.0
August	29.89	30.15	29.59	58.5	70.2	75.6	76.6	57.0	66.8	92	48	53	52	53	82	56	48	.408	.402	.408	1.41	.72	.0	5.3	4.1	3.4	4.5	
September	29.88	30.33	29.49	56.8	67.3	71.0	72.5	55.2	63.8	97	44	53	53	53	86	61	56	.403	.402	.414	2.06	1.03	.0	5.4	4.6	4.1	5.3	
October	29.87	30.24	29.62	53.5	62.9	65.3	67.5	51.0	59.2	79	44	51	51	52	91	67	63	.372	.377	.386	2.91	.89	.0	5.9	6.1	5.5	6.2	
November	29.82	30.21	29.35	48.1	51.8	51.3	54.1	45.2	49.6	63	38	44	44	44	86	77	78	.288	.292	.291	10.08	2.06	.0	8.5	8.8	8.0	8.8	
December	29.91	30.45	29.06	42.6	46.3	46.1	49.0	39.0	44.0	60	32	38	39	40	86	78	79	.237	.247	.250	13.86	5.01	2.4	7.9	7.5	7.8	8.0	
Year	29.87	30.45	29.06	48.6	57.0	59.4	61.3	46.6	53.9	97	14	44	44	44	83	64	61	.301	.304	.310	56.85	5.01	36.3	6.7	6.6	6.4	6.8	

PROVIDENCE, R. I.

[$\phi=41^{\circ}50'$ N.; $\lambda=71^{\circ}25'$ W.]

January	30.08	30.67	29.36	34.6	39.7	38.9	45.3	30.0	37.6	65	14	28	30	31	76	70	74	0.172	0.190	0.185	4.61	0.90	3.5	7.6	7.2	6.0	7.1
February	29.76	30.19	29.00	29.9	38.2	35.1	41.7	28.6	34.2	60	11	22	22	23	71	52	60	.125	.130	.130	1.75	.97	.5	5.1	4.2	5.2	4.8
March	29.69	30.23	29.10	30.4	39.1	35.8	42.7	26.5	34.6	57	16	21	19	22	65	46	58	.116	.109	.121	3.82	2.45	4.1	4.1	5.1	4.6	4.7
April	29.83	30.36	29.35	43.0	51.5	46.6	54.8	38.1	46.4	71	30	32	31	34	67	50	64	.190	.184	.204	5.27	1.92	T	6.0	6.7	5.8	6.0
May	29.78	30.20	29.50	57.6	66.0	60.8	70.2	49.7	60.0	91	40	46	46	46	69	53	64	.327	.328	.330	2.54	.86	.0	5.7	5.4	4.8	5.0
June	29.74	30.16	29.28	64.8	73.4	68.0	77.2	58.5	67.8	93	53	56	56	58	75	58	72	.456	.464	.486	3.14	1.26	.0	6.7	6.1	6.4	6.2
July	29.80	30.02	29.44	71.2	79.3	74.4	82.9	64.1	73.5	97	53	61	60	62	71	64	67	.545	.537	.571	1.16	.34	.0	5.0	4.1	5.1	4.8
August	29.90	30.14	29.61	71.4	79.9	74.5	83.5	66.6	75.0	97	55	65	64	66	81	61	78	.629	.614	.660	4.13	1.56	.0	6.6	5.1	5.9	5.5
September	29.88	30.36	29.34	58.6	68.5	62.2	71.6	54.2	62.9	92	44	52	52	54	80	58	75	.411	.407	.436	3.01	1.60	.0	4.1	3.2	4.0	3.5
October	29.87	30.48	29.24	48.2	57.4	52.6	59.8	43.5	51.6	73	30	41	41	42	77	57	71	.285	.284	.298	4.06	1.78	.0	5.3	4.7	5.3	5.6
November	29.86	30.38	29.21	39.6	48.2	45.4	51.6	35.9	43.8	67	23	32	32	34	75	55	64	.195	.194	.210	5.42	3.28	T	5.1	5.2	4.7	5.5
December	29.91	30.41	29.02	28.7	34.1	32.6	38.2	25.5	31.8	49	15	22	22	22	74	59	64	.121	.121	.121	3.22	1.65	2.9	5.9	4.3	4.3	4.8
Year-----	29.84	30.67	29.00	48.2	56.3	52.2	60.0	43.3	51.6	97	11	40	40	41	73	56	68	.298	.297	.313	42.13	3.28	11.0	5.6	5.1	5.2	5.3

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

PORT ARTHUR, TEX.

[H=6 ft.; H_b=34 ft.; h_i=59 ft.; h_r=52 ft.; h_a=134 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m. and 7:30 p. m., winds observed from																							
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	11.4	N.	31	SE.	0	5	9	5	3	4	1	0	4	0	0	8	23	18	12	0	0	0	15	6	0	0	0	2	0
February	12.3	S.	37	NW.	2	4	8	4	2	7	1	0	2	0	6	7	15	10	7	0	0	0	4	3	0	0	0	0	0
March	11.4	SE.	31	NW.	0	4	5	9	6	1	1	2	3	0	5	13	13	12	10	0	0	0	8	3	0	0	0	4	0
April	11.7	S.	30	NW.	0	1	0	2	8	10	2	2	5	0	11	13	6	5	2	0	0	1	22	0	0	0	0	4	0
May	10.3	S.	38	SE.	1	2	2	2	4	11	4	3	2	1	20	10	1	2	2	0	0	0	3	0	0	0	0	2	0
June	9.6	S.	35	NW.	2	2	4	1	1	27	14	2	8	1	8	15	7	10	9	0	0	0	0	0	8	0	12	0	
July	9.5	S.	27	SE.	0	1	1	6	5	28	12	6	3	0	4	22	5	9	6	0	0	0	0	0	14	0	12	0	
August	8.4	S.	30	SE.	0	6	6	6	12	18	12	1	1	0	5	19	7	9	8	0	0	0	0	0	18	0	17	0	
September	8.5	NE.	25	E.	0	10	20	7	8	8	3	1	0	0	13	11	6	10	9	0	0	0	1	0	5	0	10	0	
October	10.2	S.	34	NW.	1	9	10	8	6	14	6	3	6	0	18	8	5	7	3	0	0	5	2	0	0	0	2	0	
November	12.8	N.	35	NE.	3	15	6	11	9	12	0	2	5	0	13	8	9	7	7	0	0	6	3	0	0	2	2	0	
December	13.1	SE.	43	SE.	2	3	7	7	6	3	0	2	3	0	5	7	19	14	7	0	0	0	13	9	0	0	2	0	
Year	10.8	S.	43	SE.	11	62	78	68	65	143	61	26	43	2	108	141	116	113	82	0	0	1	57	26	0	45	4	67	0

PORTLAND, MAINE

[H=49 ft.; H_b=103 ft.; h_i=82 ft.; h_r=75 ft.; h_a=117 ft.]

January	8.0	N.	19	NE.	0	21	7	2	3	2	7	16	4	0	12	1	18	16	15	10	9	0	8	6	7	0	25	0	0
February	8.9	N.	24	NE.	0	21	1	3	4	5	4	4	10	4	13	9	6	7	5	4	3	0	5	3	7	0	24	0	0
March	9.3	W.	27	NE.	0	14	2	1	0	1	8	16	18	2	17	6	8	13	9	16	11	0	4	1	7	0	29	0	7
April	9.3	N.	27	NE.	0	13	10	7	1	5	10	2	11	1	10	9	11	14	11	6	6	0	6	3	0	0	3	0	12
May	8.0	E.	23	SE.	0	5	8	9	4	1	15	3	11	6	14	5	12	13	7	0	0	0	9	8	0	1	0	1	8
June	7.7	S.	19	SW.	0	11	3	8	4	11	8	5	3	7	13	8	9	17	12	0	0	0	8	10	0	1	0	4	6
July	7.4	S.	25	W.	0	3	3	4	3	13	11	12	4	9	16	14	1	6	5	0	0	2	3	2	0	4	0	6	9
August	7.1	SW.	25	SW.	0	3	4	3	2	7	21	5	3	14	19	7	5	12	8	0	0	0	4	6	0	2	0	5	7
September	7.8	N.	21	SW.	0	9	6	0	0	3	16	6	9	11	19	5	6	8	7	0	0	0	3	1	0	2	0	1	5
October	10.5	SW.	35	S.	2	8	5	1	1	9	16	7	11	4	15	6	10	12	9	1	0	0	6	4	0	0	2	1	15
November	8.9	W.	40	SE.	4	12	3	4	2	0	14	16	7	2	10	10	10	12	10	5	2	0	2	3	0	0	10	0	7
December	8.7	N.	32	NE.	1	25	3	1	0	1	7	11	13	1	15	7	9	10	9	15	6	0	2	1	12	0	30	0	9
Year	8.5	N.	40	SE.	7	145	55	43	24	58	137	103	104	61	173	87	105	140	107	59	37	2	60	48	33	10	123	18	85

PORTLAND, OREG.

[H=30 ft.; H_b=154 ft.; h_i=68 ft.; h_r=63 ft.; h_a=106 ft.]

January	7.8	E.	24	S.	0	2	7	16	13	6	8	5	4	1	11	3	17	16	15	16	9	0	4	0	12	0	25	0	0
February	7.0	SE.	26	SW.	0	2	3	6	5	18	10	3	9	0	0	3	25	21	15	9	7	1	7	1	0	0	2	0	0
March	6.3	SE.	21	SW.	0	2	0	9	13	12	6	8	12	0	0	8	23	24	15	0	0	2	5	1	0	0	0	0	0
April	7.1	SE.	21	SW.	1	2	1	9	13	14	14	6	0	1	2	27	20	18	0	0	3	2	0	0	0	0	0	1	0
May	7.2	NW.	22	S.	0	0	1	1	12	6	9	6	27	0	10	7	14	9	6	0	0	0	0	0	0	0	0	0	1
June	6.8	NW.	19	NE.	0	2	2	3	12	11	3	2	24	1	9	4	17	15	11	0	0	2	1	0	1	0	3	0	0
July	6.6	NW.	17	NW.	0	2	0	2	10	1	1	4	41	1	15	10	6	3	2	0	0	0	0	0	0	0	0	2	0
August	6.4	NW.	15	S.	0	2	0	0	7	6	4	4	38	1	13	9	9	6	4	0	0	0	0	0	0	1	0	1	0
September	5.8	NW.	15	SE.	0	3	0	2	10	6	3	3	33	0	11	11	8	4	4	0	0	0	5	1	0	1	0	0	0
October	5.3	NW.	18	S.	0	0	2	2	10	11	4	8	23	2	7	9	15	10	9	0	0	0	14	4	0	0	0	1	0
November	7.3	SE.	22	E.	0	1	1	8	16	16	6	6	5	1	1	5	24	23	21	0	0	0	9	2	0	0	0	0	0
December	7.3	S.	26	SW.	0	0	3	10	10	9	8	8	12	2	3	5	23	20	16	5	4	0	14	1	0	0	0	0	0
Year	6.7	NW.	26	SW.	0	17	21	60	127	115	76	71	234	9	81	76	208	171	136	30	20	6	62	11	12	3	27	8	1

PROVIDENCE, R. I.

[H=7 ft.; H_b=159 ft.; h_i=215 ft.; h_r=211 ft.; h_a=251 ft.]

January	10.9	NW.	32	NW.	1	10	3	4	4	8	6	4	23	0	8	4	19	14	14	6	4	0	11	2	2	0	21	0	0
February	13.1	NW.	38	SE.	5	4	3	3	3	7	5	2	29	0	13	6	9	7	4	8	1	0	5	3	2	0	23	0	0
March	13.5	NW.	40	NW.	3	4	3	2	2	3	5	12	31	0	14	8	9	11	9	13	5	0	5	1	2	0	27	0	0
April	12.1	NW.	32	NW.	1	8	5	10	5	7	7	0	18	0	9	9	12	13	10	3	0	0	4	0	0	0	3	0	1
May	10.5	NW.	32	S.	1	7	6	1	9	15	6	2	16	0	11	10	10	12	10	0	0	0	9	0	0	1	0	3	0
June	9.1	NW.	29	SW.	0	5	10	6	4	12	7	0	15	1	7	8	15	16	13	0	0	0	8	0	0	1	0	6	0
July	9.0	NW.	27	S.	0	5	5	3	4	12	15	4	13	1	14	10	7	7	6	0	0	0	0	0	0	8	0	4	0
August	8.7	SW.	30	NW.	0	9	4	3	1	17	16	0	11	1	11	9	11	11	9	0	0	1	7	1	0	5	0	7	0
September	9.8	NW.	43	NW.	1	12	4	1	2	13	8	6	14	0	15	10	5	8	6	0	0	0	8	3	0	2	0	1	0
October	11.7	NW.	47	NW.	4	5	3	3	4	17	7	4	19	0	11	10	10	8	5	0	0	0	9	1	0	0	1	1	1
November	11.7	NW.	45	SE.	5	3	0	4	3	10	7	10	22	1	10	10	10	11	8	4	0	0	2	0	0	0	7	0	0
December	10.7	NW.	38	NW.	2	11	2	1	0	3	8	9	28	0	13	9	9	10	9	8	5	0	2	1	6	0	27	0	0
Year	10.9	NW.	47	NW.	23	83	48	41	41	124	97	53	239	4	136	103	126	128	103	42	15	1	76	12	12	17	109	22	3

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

PUEBLO, COLO. [φ=38°18' N.; λ=104°36' W.]																											
Month	Pressure			Temperature									Moisture														
	Monthly mean	Extremes		Mean				Extremes			Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness						
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snow fall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
January	25.13	25.57	24.72	11.6	31.0	32.6	37.1	9.0	23.0	55	-10	5	11	10	72	46	0.053	0.071	0.069	0.18	0.09	2.2	2.2	2.8	2.7	2.7	2.7
February	25.18	25.64	24.38	25.3	42.7	46.3	49.2	20.3	34.8	68	-2	14	17	17	64	38	.084	.091	.094	.60	.21	6.8	3.2	4.1	4.3	4.6	4.6
March	25.24	25.65	24.62	29.6	45.3	47.8	50.3	27.3	38.8	67	18	21	22	22	70	44	.112	.117	.116	.77	.27	8.7	4.7	6.4	6.5	6.0	6.0
April	25.17	25.60	24.62	39.4	59.8	63.5	66.0	36.8	51.4	85	28	28	25	20	65	30	.149	.134	.109	.84	.55	2.8	3.7	5.2	5.1	4.8	4.8
May	25.26	25.67	24.77	50.9	71.2	72.4	76.7	48.9	62.8	89	38	38	35	34	64	30	.236	.211	.202	.70	.48	.0	4.6	5.5	6.7	5.6	5.6
June	25.29	25.54	24.89	58.1	78.7	80.5	84.2	55.9	70.0	99	38	45	40	39	65	30	.305	.263	.254	.51	.24	.0	4.4	3.8	6.0	4.7	4.7
July	25.35	25.59	25.18	64.5	88.1	87.9	91.9	63.2	77.6	100	55	50	46	43	61	25	.366	.317	.292	.68	.60	.0	2.6	2.5	5.6	3.8	3.8
August	25.35	25.57	25.12	66.3	88.2	87.5	92.2	64.8	78.5	99	54	50	46	44	58	25	.367	.322	.298	1.02	.88	.0	3.4	2.3	5.6	3.8	3.8
September	25.38	25.75	25.18	55.6	77.1	77.1	81.2	53.9	67.6	91	36	44	42	41	68	31	.310	.286	.275	.35	.24	.0	3.1	2.6	4.7	3.6	3.6
October	25.34	25.69	24.91	44.2	64.7	65.1	69.7	40.2	55.0	85	31	32	31	32	64	33	.183	.177	.179	.48	.45	.0	3.2	3.0	3.3	3.4	3.4
November	25.32	25.68	24.90	30.0	49.2	48.8	54.3	26.3	40.3	70	10	19	24	23	65	40	.105	.126	.124	.19	.10	2.0	3.1	3.9	3.7	3.9	3.9
December	25.31	25.69	24.82	23.0	38.8	37.5	44.8	17.8	31.3	76	3	16	21	22	74	53	.088	.113	.119	1.11	.56	11.8	3.8	4.7	3.6	4.1	4.1
Year	25.28	25.75	24.38	41.5	61.2	62.2	66.5	38.7	52.6	100	-10	30	30	29	66	35	.196	.186	.178	7.43	.88	34.3	3.5	3.9	4.8	4.8	4.2

RALEIGH, N. C. [φ=35°45' N.; λ=78°37' W.]																											
January	29.82	30.19	29.39	48.5	52.7	51.1	57.7	44.0	50.8	77	34	46	49	49	92	89	0.337	0.378	0.367	7.14	1.94	0.0	8.0	8.6	7.8	8.8	8.8
February	29.63	30.07	28.97	37.8	46.0	44.8	51.2	35.0	43.1	75	21	32	39	39	78	78	.194	.258	.255	3.40	.92	7.8	6.4	5.8	5.4	5.7	5.7
March	29.58	30.07	29.17	40.8	53.4	54.1	59.7	39.2	49.4	77	20	34	41	43	76	64	.206	.273	.301	1.93	.77	T	4.2	3.9	3.5	3.8	3.8
April	29.56	29.98	29.10	52.6	65.3	62.3	70.1	49.8	60.0	89	37	46	53	52	78	68	.322	.426	.404	6.26	2.80	.0	4.6	5.2	5.3	4.7	4.7
May	29.60	29.95	29.38	62.3	76.0	74.0	80.6	57.9	69.2	94	38	55	55	56	77	50	.446	.449	.470	.94	.60	.0	4.2	4.0	3.4	3.0	3.0
June	29.54	29.83	29.22	72.6	84.3	79.3	88.7	67.2	78.0	96	60	66	66	66	80	54	.638	.642	.644	3.81	1.24	.0	5.8	4.3	6.0	4.9	4.9
July	29.60	29.76	29.42	73.7	83.9	79.3	88.1	69.1	78.6	100	61	68	68	69	82	61	.686	.693	.710	4.33	1.77	.0	5.7	5.4	5.9	5.2	5.2
August	29.68	29.91	29.50	73.2	84.1	77.5	87.7	69.6	78.6	92	62	70	71	70	91	65	.746	.751	.739	5.65	1.60	.0	5.7	5.0	6.5	5.2	5.2
September	29.66	30.05	29.32	63.2	74.3	71.3	78.3	60.7	69.5	93	51	58	58	60	83	58	.497	.501	.527	1.85	1.55	.0	4.7	4.7	4.1	4.2	4.2
October	29.65	30.14	29.07	52.6	65.1	60.7	68.5	49.9	59.2	87	33	46	50	53	80	59	.343	.383	.423	3.54	1.11	.0	5.6	5.1	4.8	5.3	5.3
November	29.71	30.27	29.15	42.9	55.3	52.0	59.2	40.0	49.6	75	22	35	40	41	73	58	.219	.267	.276	1.61	1.27	.0	4.4	4.2	3.3	4.1	4.1
December	29.75	30.15	29.17	36.7	45.5	44.5	50.5	34.6	42.6	71	18	30	34	36	77	66	.183	.211	.223	2.38	1.20	2.0	6.0	5.3	4.5	5.2	5.2
Year	29.65	30.27	28.97	54.7	65.5	62.6	70.0	51.4	60.7	100	18	49	52	53	81	64	.401	.436	.445	42.84	2.80	9.8	5.4	5.1	5.0	5.0	5.0

RAPID CITY, S. DAK. [φ=44°04' N.; λ=103°12' W.]																											
January	26.54	62.94	25.89	3.8	11.7	9.0	16.7	-4.6	6.0	45	-17	0	7	6	84	81	0.042	0.060	0.057	0.35	0.12	6.4	4.1	4.8	4.5	5.1	5.1
February	26.51	26.93	25.90	18.0	30.1	29.5	35.7	11.4	23.6	63	-17	11	16	18	75	58	.073	.092	.099	.24	.22	2.6	4.4	3.8	3.8	4.3	4.3
March	26.66	26.96	26.11	24.1	37.5	38.2	41.4	20.4	30.9	72	-5	18	24	25	80	65	.108	.129	.133	1.63	1.20	16.4	4.8	4.5	6.2	5.3	5.3
April	26.52	26.91	26.05	36.3	49.7	51.3	54.1	34.1	44.1	83	20	27	28	29	70	48	.147	.155	.160	.50	.34	.4	4.9	5.2	5.1	5.3	5.3
May	26.60	27.03	26.16	50.5	63.0	65.6	68.8	47.2	58.0	92	38	39	42	41	67	50	.245	.269	.263	2.80	1.18	.0	5.0	5.9	5.4	5.2	5.2
June	26.61	26.90	26.28	57.3	70.6	71.7	74.3	53.2	63.8	102	35	48	50	50	74	53	.342	.365	.373	2.77	1.30	.0	4.9	5.0	4.7	4.7	4.7
July	26.65	26.93	26.42	65.3	81.6	82.6	86.5	62.6	74.6	102	54	53	55	55	67	43	.411	.441	.443	3.45	1.04	.0	3.7	3.3	3.9	3.5	3.5
August	26.61	26.89	26.37	66.3	85.4	87.8	90.7	62.7	76.7	102	52	49	49	47	56	31	.352	.353	.329	.43	.27	.0	3.8	4.1	3.6	3.3	3.3
September	26.67	27.05	26.37	55.9	71.9	72.6	76.6	51.9	64.2	97	36	43	44	45	64	40	.295	.300	.307	.67	.53	.0	4.1	3.4	4.2	3.6	3.6
October	26.65	27.01	26.21	42.9	59.1	56.2	63.0	39.3	51.2	88	26	31	36	37	66	48	.177	.216	.224	.14	.05	.1	3.5	4.3	4.0	4.2	4.2
November	26.65	27.09	26.02	29.5	40.9	36.5	44.5	24.4	34.4	69	3	21	25	24	73	59	.115	.134	.132	.22	.15	2.4	5.2	6.1	4.2	6.0	6.0
December	26.62	27.11	26.19	23.2	33.5	28.0	37.4	15.6	26.5	61	-11	15	20	21	74	61	.091	.112	.118	.79	.55	4.5	4.4	6.0	4.8	5.3	5.3
Year	26.61	27.11	25.89	39.4	52.9	52.4	57.5	34.8	46.2	102	-17	30	33	33	71	53	.199	.219	.220	13.99	1.30	32.8	4.4	4.7	4.5	4.6	4.6

READING, PA. [φ=40°20' N.; λ=75°58' W.]																												
January	29.90	30.42	29.29	36.1	39.5	39.7	44.9	32.7	38.8	68	23	30	32	32	80	76	0.178	0.193	0.190	5.05	0.78	1.7	8.3	8.8	7.7	8.1	8.1	
February	29.65	30.07	29.04	30.6	36.4	36.9	41.8	26.7	34.2	62	17	22	23	23	69	59	.122	.130	.129	1.83	.78	1.8	6.6	6.7	5.1	6.0	6.0	
March	29.60	30.10	29.17	34.0	39.5	40.0	44.1	30.7	37.4	64	20	23	21	24	64	49	.126	.118	.131	2.43	.89	11.1	6.7	5.8	4.8	5.5	5.5	
April	29.64	30.10	29.19	45.5	63.1	61.8	58.2	41.5	49.8	83	33	35	34	34	67	52	.210	.209	.208	3.24	.94	T	7.2	7.0	6.7	6.6	6.6	
May	29.62	30.09	29.33	58.5	69.6	66.8	74.6	53.7	64.2	99	42	48	47	49	70	48	.355	.349	.365	2.61	.89	.0	5.0	5.3	5.2	5.0	5.0	
June	29.56	29.90	29.15	67.8	76.9	74.1	80.9	63.0	72.0	93	54	60	59	61	77	56	.522	.514	.548	3.10	.66	.0	6.1	6.5	6.6	6.3	6.3	
July	29.63	29.84	29.34	70.3	80.0	77.6	83.8	65.9	74.8	96	55	62	61	63	76	53	.611	.568	.543	5.81	1.0	1.22	.0	5.7	5.0	6.3	5.5	5.5
August	29.72	29.98	29.43	71.0	80.0	77.0	83.5	67.5	75.5	96	57	65	65	66	83	62	.71	.631	.627	6.52	1.3	1.83	.0	5.8	5.9	6.1	5.8	5.8
September	29.72	30.19	29.27	58.7	69.5	66.5	73.8	55.6	64.7	92	44	52	51	52	79	54	.408	.399	.409	.89	.44	.0	3.8	4.5	3.5	3.9	3.9	
October	29.70	30.29	29.36	48.4	57.8	55.1	62.4	45.5	54.0	79	31	42	42	42	79	57	.288	.288	.288	5.37	2.30	T	6.5	6.2	5			

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

PUEBLO, COLO.

[H=4,663 ft.; H_b=4,685 ft.; h_i=80 ft.; h_r=72 ft.; h_a=86 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from										Precipitation	Snow			Fog		Maximum temp.		32°	Elec- tricit				
	Average hourly ve- locity	Prevaling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	7.9	E.	36	NW.	3	8	4	16	8	1	4	12	9	0	21	8	2	4	2	6	4	0	0	0	7	0	31	0	0
February	9.0	NW.	36	NW.	2	0	6	16	1	1	3	12	17	0	9	16	3	5	5	5	5	0	0	0	4	0	24	0	0
March	8.2	E.	38	NW.	4	4	6	29	1	2	3	8	9	0	6	14	11	8	6	10	7	0	0	0	4	0	23	0	0
April	8.1	NW.	32	W.	1	6	6	14	3	3	5	8	15	0	11	12	7	6	3	5	4	0	0	0	0	0	6	1	0
May	7.6	NW.	30	SW.	0	9	10	8	7	1	3	5	19	0	7	14	10	7	4	0	0	0	9	0	0	0	5	0	0
June	7.7	E.	25	NE.	0	8	8	16	8	1	5	5	9	0	12	12	6	7	5	0	0	0	1	0	0	11	0	5	0
July	7.3	E.	34	NW.	2	12	5	14	9	1	1	2	18	0	17	11	3	6	2	0	0	1	0	0	0	22	0	5	0
August	7.8	NW.	30	NW.	0	8	3	15	5	3	2	6	20	0	16	14	1	5	3	0	0	0	0	0	0	20	0	7	0
September	7.0	NW.	31	NW.	0	8	5	19	5	1	2	4	16	0	18	8	4	4	2	0	0	0	0	0	0	1	0	3	0
October	6.6	NW.	27	W.	0	4	2	18	11	1	3	5	18	0	18	8	5	3	1	0	0	0	0	0	0	0	1	0	0
November	6.5	NW.	32	W.	1	4	4	11	14	1	2	6	18	0	14	13	3	3	3	3	3	0	0	0	2	0	22	0	0
December	6.3	NW.	37	W.	1	4	1	13	9	0	2	16	17	0	15	10	6	7	4	9	7	0	0	0	5	0	30	0	0
Year	7.5	E.	38	NW.	14	75	60	189	81	16	35	89	185	0	164	140	61	65	40	38	30	1	1	0	22	54	137	26	0

RALEIGH, N. C.

[H=345 ft.; H_b=376 ft.; h_i=103 ft.; h_r=94 ft.; h_a=146 ft.]

January	9.6	NE.	32	N.	1	8	20	6	0	5	15	6	2	0	1	4	26	23	18	0	0	0	18	8	0	0	0	0	0	0
February	9.7	SW.	28	NW.	0	11	6	7	0	4	15	5	8	0	9	7	12	13	13	4	3	0	8	3	0	0	10	0	0	0
March	10.1	NW.	27	NW.	0	8	8	2	6	3	8	15	12	0	17	6	8	8	7	1	0	0	3	1	0	0	7	0	0	0
April	10.0	SW.	26	SE.	0	5	6	8	6	5	11	10	8	1	13	9	8	13	13	0	0	0	2	0	0	0	0	4	0	0
May	8.4	SW.	21	W.	0	11	7	3	8	9	13	8	3	0	21	9	1	2	2	0	0	0	0	0	0	2	0	4	0	0
June	8.0	SW.	36	NW.	2	8	4	1	4	6	19	12	5	1	9	19	2	10	9	0	0	0	1	0	0	11	0	9	0	0
July	7.1	SW.	40	W.	1	11	5	3	6	6	14	9	6	2	6	19	6	11	10	0	0	0	3	1	0	12	0	12	0	0
August	7.0	SW.	27	W.	0	2	10	7	9	9	19	4	0	2	7	16	8	18	15	0	0	0	11	3	0	10	0	14	0	0
September	7.8	NE.	19	NE.	0	10	24	3	0	4	11	5	3	0	14	9	7	3	3	0	0	0	1	0	0	3	0	0	0	0
October	9.5	NE.	21	SE.	0	9	16	5	2	5	8	14	3	0	10	10	11	13	7	0	0	0	2	1	0	0	0	1	0	0
November	8.6	NW.	21	SW.	0	11	6	3	5	2	13	7	12	1	14	9	7	8	3	0	0	0	3	0	0	0	7	0	0	0
December	8.3	N.	21	N.	0	17	11	2	1	2	15	9	4	1	11	12	8	11	6	1	1	0	5	1	0	0	13	0	0	0
Year	8.7	SW.	40	W.	4	111	123	50	47	60	161	104	66	8	132	129	104	133	106	6	4	0	57	18	0	38	37	44	0	0

RAPID CITY, S. DAK.

[H=3,242 ft.; H_b=3,259 ft.; h_i=50 ft.; h_r=43 ft.; h_a=58 ft.]

January	7.0	N.	28	N.	0	16	9	1	6	7	1	11	9	2	12	9	10	8	4	15	8	0	1	0	25	0	31	0	0	0
February	8.8	N.	41	NE.	3	15	4	3	10	4	3	8	9	0	12	11	5	3	2	9	3	0	1	0	12	0	28	0	0	0
March	8.1	N.	30	NW.	0	14	7	4	14	4	2	5	12	0	10	12	9	6	3	14	6	0	3	4	9	0	28	0	0	0
April	10.1	N.	33	N.	1	14	4	2	13	1	3	8	14	1	10	12	8	6	3	3	1	0	2	2	1	0	1	0	0	0
May	9.6	N.	32	NW.	1	13	2	3	7	9	1	9	18	0	11	11	9	13	9	0	0	1	0	0	0	1	0	6	0	0
June	8.5	S.	38	NW.	1	9	4	4	12	9	3	12	7	0	15	7	8	7	7	0	0	0	0	0	0	3	0	4	0	0
July	7.2	N.	27	N.	0	12	5	3	6	7	3	20	5	1	18	11	2	11	11	0	0	2	0	0	0	10	0	12	0	0
August	8.0	W.	26	NW.	0	13	6	2	4	7	6	16	5	3	18	10	3	3	2	0	0	0	0	0	0	18	0	5	1	0
September	7.9	W.	35	NW.	1	15	2	5	4	9	2	12	11	0	17	7	6	3	2	0	0	0	2	0	0	4	0	5	0	0
October	8.6	W.	27	NW.	0	12	4	3	11	6	0	11	15	0	17	6	8	5	2	1	1	0	1	0	0	0	6	1	1	0
November	8.1	NW.	32	NW.	1	14	4	1	8	6	4	9	14	0	9	9	12	5	2	10	4	0	2	2	8	0	22	0	0	0
December	7.9	N.	30	W.	0	12	3	2	11	1	1	12	19	1	9	16	6	5	5	11	4	0	1	0	12	0	30	0	0	0
Year	8.3	N.	41	NE.	8	159	54	33	106	70	29	133	138	8	158	121	86	75	52	63	27	3	13	8	67	36	157	33	2	0

READING, PA.

[H=273 ft.; H_b=323 ft.; h_i=283 ft.; h_r=275 ft.; h_a=306 ft.]

January	10.6	NW.	38	SW.	3	12	9	6	12	3	6	2	12	0	2	8	21	16	15	4	4	0	12	15	0	0	15	0	0
February	13.1	NW.	43	SE.	5	8	6	1	6	5	6	4	20	0	6	12	10	11	7	11	5	0	2	7	2	0	24	2	0
March	13.7	NW.	35	NW.	7	7	3	5	5	1	5	9	27	0	9	14	8	12	8	9	7	1	3	2	1	0	18	2	0
April	15.0	NW.	43	SE.	8	7	4	12	9	4	5	4	15	0	5	12	13	13	11	2	0	0	4	1	0	0	0	3	0
May	10.0	NW.	50	SW.	2	7	2	4	4	10	14	6	15	0	9	15	7	13	10	0	0	2	7	2	0	0	0	9	2
June	9.7	SE.	45	NW.	1	8	7	2	10	9	8	5	10	1	6	14	10	15	12	0	0	0	7	2	0	1	0	9	0
July	8.7	NW.	49	E.	1	12	1	5	9	8	11	5	10	1	7	20	4	15	11	0	0	1	5	1	0	6	0	9	0
August	7.9	S.	35	W.	1	6	5	5	13	13	10	3	7	0	8	12	11	12	11	0	0	0	6	1	0	4	0	11	1
September	8.6	NW.	30	W.	0	12	9	1	6	7	10	4	10	1	16	7	7	5	5	0	0	0	5	0	0	1	0	1	0
October	11.9	NW.	47	NE.	4	6	6	5	11	10	7	6	11	0	7	8	16	12	9	1	0	0	5	2	0	0	2	0	0
November	11.4	NW.	45	SE.	3	5	1	4	5	8	5	6	26	0	12	8	10	11	8	4	1	0	6	7	0	0	10	0	0
December	10.7	NW.	39	W.	2	13	6	2	8	2	9	5	17	0	8	7	16	11	7	8	6	0	6	3	5	0	19	0	0
Year	10.9	NW.	50	SW.	37	103	59	52	98	80	96	59	180	3	95	137	133	146	114	39	23	4	68	43	8	12	88	46	3

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

REDDING, CALIF.

[$\phi=40^{\circ}35' N.$; $\lambda=122^{\circ}24' W.$]

Month	Pressure			Temperature									Moisture														
	Monthly mean	Extremes		Mean						Extremes		Dew point			Relative humidity		Vapor pressure			Precipitation			Cloudiness				
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snow fall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	
January	29.69	28.91	30.9	36.7	38.6	39.9	28.3	34.1	51	17	24	23	25	74	62	62	0.132	0.134	0.143	2.72	0.91	19.9	4.7	6.0	6.0	6.1	
February	29.58	28.67	39.6	47.8	50.2	51.5	37.1	44.3	66	30	33	33	33	78	60	56	.190	.192	.192	8.44	3.87	4.3	7.1	7.9	8.8	8.3	
March	29.55	28.66	45.9	56.2	58.5	60.1	43.8	52.0	74	36	39	40	39	80	58	53	.245	.249	.241	9.08	2.06	.0	6.7	8.2	9.0	8.7	
April	29.49	28.86	48.8	61.1	64.0	65.6	46.3	56.0	84	37	37	34	34	64	41	37	.222	.207	.205	2.70	1.17	.0	4.2	5.6	5.9	5.5	
May	29.44	28.85	58.6	76.5	80.2	81.6	56.7	69.2	95	45	39	36	35	51	32	23	.242	.221	.212	.12	.11	.0	3.0	4.5	4.0	4.1	
June	29.36	28.88	64.9	78.9	82.8	84.4	62.9	73.6	106	49	47	46	44	56	37	31	.334	.320	.301	2.87	2.21	.0	4.1	5.1	6.0	5.3	
July	29.25	28.81	73.4	92.1	96.2	97.8	71.6	84.7	107	60	48	46	42	42	22	17	.338	.323	.280	T	T	.0	.8	1.1	1.4	1.3	
August	29.30	28.87	70.9	91.0	94.9	96.2	69.0	82.6	109	59	42	40	36	36	18	14	.276	.255	.215	.0	.0	.0	.2	.2	.1	.3	
September	29.40	28.93	65.3	83.3	85.9	87.7	62.9	75.3	104	54	41	41	38	44	25	22	.264	.267	.241	.02	.02	.0	1.9	3.0	3.3	2.6	
October	29.46	29.04	57.7	71.2	73.5	75.3	55.2	65.2	90	46	44	45	45	64	45	43	.296	.307	.317	3.86	2.49	.0	2.1	5.5	3.1	3.3	
November	29.49	28.85	50.3	58.1	59.2	61.5	47.6	54.6	76	40	43	44	45	77	64	63	.278	.293	.303	13.12	4.00	.0	5.7	7.0	6.2	6.6	
December	29.66	28.74	47.9	55.8	56.7	59.5	44.5	52.0	75	32	37	38	40	70	58	58	.227	.241	.255	8.48	5.63	.5	4.8	5.9	6.5	6.4	
Year	29.69	28.66	54.5	67.4	70.1	71.8	52.2	62.0	109	17	40	39	38	61	44	40	.254	.251	.242	51.41	5.63	24.7	3.8	4.8	5.0	4.9	

RENO, NEV.

[$\phi=39^{\circ}32' N.$; $\lambda=119^{\circ}49' W.$]

January	25.39	25.76	25.02	11.4	20.4	22.7	26.2	5.3	15.8	46	-16	6	12	14	76	69	70	0.064	0.079	0.086	1.90	0.78	26.6	4.8	5.8	6.0	5.8
February	25.41	25.72	24.80	29.5	41.2	42.3	46.6	24.5	35.6	62	5	22	27	28	73	57	57	.120	.147	.152	1.71	.76	6.0	4.2	5.4	6.3	5.2
March	25.38	25.79	24.89	34.8	50.2	51.8	54.7	31.9	43.3	66	25	26	27	29	69	41	39	.137	.148	.144	.06	.02	T	4.3	5.9	5.5	5.5
April	25.45	25.65	25.02	36.6	54.8	55.9	59.1	33.7	46.4	74	23	25	24	25	62	31	32	.136	.129	.136	.21	.17	.1	3.9	4.3	4.4	4.1
May	25.42	25.69	25.17	46.2	69.0	70.9	74.7	43.8	59.2	86	34	32	31	31	59	26	24	.183	.172	.173	.02	.02	.0	2.7	3.4	4.4	3.1
June	25.46	25.61	25.25	51.2	74.0	75.0	77.9	49.6	63.8	95	38	37	34	36	60	25	26	.226	.202	.218	.03	.02	.0	3.4	3.7	4.3	3.7
July	25.49	25.64	25.30	57.7	85.7	85.2	90.1	56.4	73.2	98	49	47	40	40	56	21	22	.268	.255	.258	.36	.23	.0	1.1	2.0	3.5	1.9
August	25.49	25.67	25.31	56.6	82.9	85.7	88.4	53.8	71.1	99	45	42	34	35	49	18	17	.227	.201	.206	.00	.60	.0	.9	1.1	1.3	1.2
September	25.48	25.74	25.25	50.4	75.8	79.3	81.0	47.3	64.6	94	40	34	35	32	55	23	19	.198	.205	.185	.05	.05	.0	1.0	1.6	1.6	1.2
October	25.52	25.74	25.25	40.8	64.8	66.6	70.3	38.0	54.2	80	31	31	32	67	32	29	.172	.189	.184	.20	.20	.0	1.6	2.1	2.7	2.0	
November	25.50	25.70	25.19	36.3	51.6	53.3	57.8	32.2	45.0	68	24	27	30	31	70	45	45	.148	.169	.176	1.11	.54	T	3.6	4.3	5.5	4.7
December	25.53	25.88	25.06	28.9	42.4	44.6	47.7	26.0	36.8	65	13	25	30	31	83	63	60	.136	.169	.174	1.70	.86	.9	1.9	5.5	5.2	4.9
Year	25.46	25.88	24.80	40.0	59.4	61.1	64.6	36.9	50.8	99	-16	29	30	30	65	38	37	.168	.172	.174	7.35	.86	33.6	2.8	3.8	4.2	3.6

RICHMOND, VA.

[$\phi=37^{\circ}32' N.$; $\lambda=77^{\circ}27' W.$]

January	30.11	30.59	29.57	44.7	48.3	46.5	53.3	39.6	46.4	72	28	40	42	42	86	81	84	0.276	0.292	0.283	10.08	2.12	0.0	8.6	9.2	7.8	9.0
February	29.89	30.32	29.18	33.2	42.7	41.5	48.5	30.1	39.3	73	20	28	28	29	81	58	63	.165	.171	.181	2.42	.50	3.5	6.0	6.3	4.9	6.2
March	29.83	30.31	29.34	36.8	49.8	48.4	55.3	34.1	44.7	75	16	29	30	73	47	52	.166	.169	.179	1.66	.74	1.6	4.5	3.7	3.8	4.3	
April	29.83	30.29	29.31	50.5	61.8	59.4	67.1	45.6	56.4	91	34	41	42	41	72	51	55	.274	.282	.275	6.02	2.39	.0	5.8	5.7	5.8	5.9
May	29.86	30.29	29.60	60.5	74.0	70.2	78.7	55.0	66.8	91	40	54	53	54	78	50	57	.426	.417	.428	1.64	.68	.0	4.3	3.9	3.5	4.2
June	29.79	30.10	29.44	71.2	82.8	76.8	86.4	66.4	76.4	93	56	65	64	65	82	54	69	.623	.605	.623	6.02	2.16	.0	6.1	4.4	6.1	5.9
July	29.86	30.05	29.61	72.3	83.0	78.7	86.2	67.9	77.0	97	58	67	67	69	85	59	73	.675	.670	.709	6.00	2.34	.0	5.2	4.7	5.6	5.4
August	29.93	30.19	29.71	71.7	83.1	77.5	86.3	68.8	77.6	92	62	69	69	70	92	64	78	.715	.724	.728	9.85	3.58	.0	5.9	4.8	6.2	5.6
September	29.94	30.40	29.50	60.2	73.2	67.7	76.6	56.9	66.8	91	45	57	56	59	89	57	74	.478	.472	.514	2.61	1.34	.0	3.7	4.1	3.3	4.1
October	29.91	30.47	29.27	49.8	63.1	57.2	66.4	46.5	56.4	84	33	45	46	47	85	57	71	.328	.340	.356	6.34	2.43	.0	5.2	5.2	3.9	5.5
November	29.97	30.56	29.36	39.8	53.9	49.3	58.4	37.2	47.8	75	21	34	34	35	81	49	59	.214	.219	.225	2.44	1.79	T	4.4	3.6	3.6	4.1
December	30.02	30.47	29.43	34.0	43.1	40.9	48.1	31.8	40.0	70	20	28	28	28	78	57	62	.168	.170	.170	.90	0.41	1.2	5.8	5.8	5.0	5.7
Year	29.91	30.59	29.18	52.1	63.2	59.5	67.6	48.3	58.0	97	16	46	47	47	82	57	66	.376	.378	.389	55.98	3.58	6.3	5.5	5.1	5.0	5.5

ROCHESTER, N. Y.

[$\phi=43^{\circ}08' N.$; $\lambda=77^{\circ}42' W.$]

January	29.62	30.30	28.91	31.3	34.1	33.7	40.5	25.8	33.2	65	16	24	26	25	73	70	68	0.138	0.145	0.141	3.13	0.58	7.4	8.1	8.8	7.2	7.6
February	29.39	29.97	28.77	26.6	30.8	30.6	35.9	22.5	29.2	58	12	19	20	20	73	63	64	.107	.113	.115	1.38	.70	6.1	8.1	8.4	5.9	7.2
March	29.39	29.87	28.95	26.1	30.0	29.0	33.6	23.2	28.4	45	12	20	20	22	75	68	72	.107	.113	.116	2.83	.74	30.0	7.2	7.1	6.5	6.7
April	29.42	29.89	28.97	41.0	47.6	46.6	52.3	37.4	44.8	66	29	32	33	33	72	60	61	.187	.195	.192	3.42	1.13	1.0	6.6	6.8	6.4	6.8
May	29.42	29.83	29.10	54.4	63.5	60.8	67.5	48.7	58.1	88	38	44	46	46	70	57	61	.299	.328	.326	2.37	.85	.0	4.7	5.5	3.8	5.4
June	29.37	29.67	29.03	64.4	71.2	68.9	75.0	58.5	66.8	86	50	54	54	54	71	57	62	.428	.427	.430	3.76	1.13	.0	5.9	6.6	5.4	5.5
July	29.41	29.59	29.10	69.5	78.8	75.1	81.7	63.8	72.8	93	54	59	60	59	69	54	59	.505	.526	.507	1.92	.63	.0	4.7	5.2	3.8	4.7
August	29.50	29.75	29.15	69.5	80.4	75.2	82.8	65.5	74.2	91	57	62	62	63	78	55	68	.567	.573	.589	4.71	3.13	.0	4.8	5.2	4.6	5.0
September	29.51	29.99	28.89	66.3	67.1	62.7	70.3	65.2	61.2	90	41	48	49	48	74	53	60	.355	.373	.364	.50	.18	.0	4.7	5.9	3.2	4.5
October	29.44	30.06	28.82	46.1	52.5	49.2	55.8	42.1	49.0	85	31	39	39	40	76	60	70	.250	.256	.263	4.21	1.16	.2	7.3	7.6	7.2	7.9
November	29.46	29.97	28.84	37.6	43.0	40.1	46.0	34.4	40.2	67	24	30	30	30	73	62	67	.170	.178	.168	2.65	1.57	5.7	8.3	8.1	7.2	8.0
December	29.52	30.06	28.86	26.5	29.2	28.4	32.8	23.5	28.2	44	12	20	20	20	75	68	69	.112	.112	.110	2.15	.64	8.1	8.5	7.8	8.0	8.3
Year	29.45	30.30	28.77	45.8	52.4	50.0	56.2	41.5	48.8	93	12	38	38	38	73	61	65	.269	.278	.277	33.03	3.13	58.5	6.7	6.9	5.9	6.5

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

REDDING, CALIF.

[H=714 ft.; H_b=722 ft.; h_i=20 ft.; h_r=3 ft.; h_a=34 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7.30 a. m., and 7.30 p. m., winds observed from											Precipitation	Snow		Fog		Maximum temp.	32° temperature or below	Elec- tricity					
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	Mi. 7.7	NW.	32	N.	1	14	4	4	4	2	8	1	25	0	9	8	14	13	10	14	8	0	12	6	2	0	25	0	0
February	Mi. 7.7	NW.	35	S.	1	11	3	2	7	9	2	0	22	0	2	6	20	13	9	3	3	0	6	0	0	0	2	0	0
March	Mi. 8.1	NW.	34	SE.	1	7	3	4	13	9	5	0	21	0	3	5	23	16	14	0	0	3	4	1	0	0	0	3	0
April	Mi. 8.8	NW.	26	NW.	0	4	4	2	7	9	9	4	21	0	9	11	10	9	6	0	0	0	0	0	0	0	0	0	0
May	Mi. 9.6	NW.	27	NW.	0	9	3	1	7	11	2	3	26	0	15	8	8	2	2	0	0	0	0	0	0	6	0	0	0
June	Mi. 8.3	NW.	31	SE.	0	6	3	0	11	9	8	3	20	0	11	6	13	6	5	0	0	0	1	0	0	11	0	1	0
July	Mi. 8.6	NW.	26	NW.	0	7	2	2	12	7	3	3	26	0	26	4	1	0	0	0	0	0	0	0	0	28	0	2	0
August	Mi. 8.8	NW.	28	NW.	0	4	3	1	20	3	1	0	30	0	29	2	0	0	0	0	0	0	0	0	0	26	0	0	0
September	Mi. 7.8	NW.	28	NW.	0	6	3	2	17	6	0	0	26	0	20	6	4	1	0	0	0	0	0	0	0	11	0	0	0
October	Mi. 7.5	NW.	20	N.	0	10	2	2	6	9	0	4	29	0	18	5	8	8	6	0	0	0	4	0	0	1	0	1	0
November	Mi. 8.1	NW.	29	SE.	0	10	1	0	8	10	6	3	22	0	9	3	18	12	12	0	0	0	6	1	0	0	0	2	0
December	Mi. 7.9	NW.	36	S.	1	17	1	2	9	9	2	2	20	0	9	6	16	8	5	1	1	0	8	1	0	0	1	1	0
Year	8.3	NW.	36	S.	4	105	32	22	121	93	46	23	288	0	160	70	135	88	69	18	12	3	41	9	2	83	28	10	0

RENO, NEV.

[H=4,493 ft.; H_b=4,527 ft.; h_i=61 ft.; h_r=53 ft.; h_a=76 ft.]

January	5.5	W.	27	W.	0	4	6	7	7	7	13	15	3	0	7	12	12	10	7	15	10	0	1	1	20	0	31	0	0
February	6.7	W.	34	SE.	1	10	4	1	4	7	10	12	8	0	10	10	8	8	8	7	5	0	0	1	0	0	27	0	0
March	7.6	W.	30	SW.	0	4	1	4	5	4	14	23	7	0	7	14	10	4	0	5	2	0	1	0	0	0	20	0	0
April	8.6	W.	30	W.	0	5	2	2	3	6	17	16	9	0	15	7	8	4	1	3	2	0	0	0	0	0	10	0	0
May	7.4	W.	29	NW.	0	5	6	4	2	1	20	22	1	1	19	9	3	1	0	0	0	0	0	0	0	0	0	0	0
June	7.7	W.	27	W.	0	3	5	1	2	3	22	19	5	0	17	11	2	2	0	0	0	0	0	0	0	3	0	0	0
July	6.7	SW.	29	SE.	0	2	1	0	7	2	25	22	3	0	23	6	2	4	3	0	0	0	0	0	0	20	0	8	0
August	6.6	SW.	21	W.	0	0	4	2	2	0	32	20	2	0	27	3	1	0	0	0	0	0	0	0	0	16	0	0	0
September	6.1	SW.	24	SW.	0	1	6	3	3	5	27	12	3	0	26	3	1	1	0	0	0	0	0	0	0	6	0	2	0
October	5.4	SW.	27	NW.	0	2	9	8	1	9	15	13	5	0	25	4	2	2	2	0	0	0	0	0	0	0	3	1	0
November	6.2	SW.	29	SE.	0	3	5	2	8	7	17	16	2	0	11	13	6	5	3	1	1	0	0	0	0	0	17	0	0
December	4.8	W.	35	SW.	2	3	8	7	8	9	8	16	2	1	12	8	11	5	5	2	2	0	2	4	1	0	26	0	0
Year	6.6	W.	35	SW.	3	42	57	41	52	60	220	206	50	2	199	100	66	46	30	33	22	0	4	6	21	45	134	11	0

RICHMOND, VA.

[H=162 ft.; H_b=144 ft.; h_i=11 ft.; h_r=3 ft.; h_a=52 ft.]

January	9.4	NE.	26	SW.	0	2	13	16	4	0	17	6	4	0	2	2	27	22	18	0	0	0	9	4	0	0	3	0	0
February	8.4	SW.	32	NW.	1	10	10	4	6	3	12	4	7	0	8	6	14	11	9	7	4	0	3	1	0	0	17	0	1
March	8.9	NW.	34	W.	1	6	13	5	6	2	11	7	12	0	13	12	6	6	5	2	1	0	0	0	0	0	14	0	0
April	9.4	SW.	34	SW.	1	5	10	3	17	2	13	5	5	0	10	8	12	12	11	0	0	1	0	0	0	1	0	6	0
May	6.5	SW.	27	W.	0	2	8	6	12	8	18	7	1	0	11	17	3	8	5	0	0	0	3	1	0	2	0	5	0
June	7.0	SW.	30	NW.	0	3	10	5	4	11	18	7	2	0	7	13	10	13	9	0	0	0	5	0	0	7	0	12	0
July	6.3	SW.	24	SW.	0	4	13	2	8	6	14	11	4	0	9	12	10	14	10	0	0	0	7	4	0	9	0	10	0
August	6.4	SW.	32	SW.	1	3	8	3	8	6	28	4	2	0	12	6	13	14	13	0	0	0	6	3	0	8	0	10	0
September	6.5	NE.	19	NW.	0	3	23	6	8	1	14	3	2	0	16	6	8	7	7	0	0	0	5	2	0	3	0	1	0
October	7.8	NE.	23	SW.	0	5	14	5	10	6	10	7	5	0	9	11	11	13	12	0	0	0	6	4	0	0	0	1	0
November	7.9	SW.	24	SW.	0	4	8	2	4	4	22	6	10	0	18	2	10	9	7	1	0	0	2	1	0	0	6	0	0
December	8.1	NE.	27	W.	0	6	15	6	6	1	17	6	5	0	10	10	11	8	6	5	2	0	2	1	1	0	17	0	0
Year	7.7	SW.	34	SW.	4	53	145	63	93	50	194	73	59	0	125	105	135	137	112	15	7	1	48	21	1	30	57	45	1

ROCHESTER, N. Y.

[H=498 ft.; H_b=523 ft.; h_i=86 ft.; h_r=77 ft.; h_a=102 ft.]

January	10.4	SW.	28	W.	0	1	3	6	4	9	18	14	7	0	2	12	17	20	14	14	10	0	1	0	5	0	26	0	0
February	9.9	W.	30	W.	0	3	2	6	7	16	15	5	0	4	9	15	14	5	17	11	0	1	0	15	0	24	0	0	0
March	10.5	W.	31	W.	0	5	4	2	3	0	16	20	12	0	6	8	17	17	10	24	16	0	2	0	13	0	27	0	0
April	9.3	W.	34	SW.	1	6	8	8	7	6	9	11	5	0	6	7	17	20	14	8	7	0	2	0	0	0	6	0	0
May	8.2	W.	27	W.	0	9	9	1	2	1	19	15	6	0	11	8	12	13	8	0	0	4	2	0	0	0	1	0	0
June	7.0	SW.	20	SW.	0	5	10	4	5	3	14	12	7	0	10	9	11	14	11	0	0	4	0	0	0	0	2	0	0
July	7.7	SW.	30	W.	0	8	6	1	3	1	28	8	7	0	14	8	9	9	7	0	0	0	0	0	0	3	0	4	0
August	6.4	SW.	23	SW.	0	5	10	5	2	6	17	7	10	0	14	10	7	8	6	0	0	4	0	0	0	3	0	7	0
September	8.1	SW.	28	W.	0	3	5	2	3	5	22	14	6	0	11	11	8	6	3	0	0	0	0	0	0	1	0	2	0
October	8.9	SW.	34	SW.	1	3	4	3	5	11	17	18	1	0	3	5	23	15	11	5	3	0	4	1	0	0	1	0	0
November	10.2	SW.	38	SW.	2	1	1	1	5	3	31	15	3	0	2	5	23	11	6	7	3	0	2	0	1	0	11	0	0
December	9.3	SW.	33	W.	1	3	2	2	6	2	28	15	4	0	5	2	24	15	11	17	11	0	3	0	12	0	27	0	0
Year	8.8	SW.	38	SW.	5	52	64	37	51	54	235	164	73	0	88	94	182	162	106	92	61	0	27	3	46	7	122	16	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

ROSEBURG, OREG.

[$\phi=43^{\circ}13' N.$; $\lambda=123^{\circ}20' W.$]

Month	Pressure			Temperature									Moisture													
	Monthly mean	Extremes		Mean					Extremes		Dew point	Relative humidity	Vapor pressure		Precipitation		Cloudiness									
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum			Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight			
January	29.53	30.00	29.08	29.1	34.7	36.9	39.8	25.3	32.6	49	7	27	28	28	90	78	0.148	0.162	0.161	5.25	2.44	7.7	7.7	7.3	7.1	7.9
February	29.46	29.88	28.95	38.3	45.8	47.9	50.3	35.4	42.8	57	28	36	37	37	91	73	0.211	0.224	0.219	5.07	0.77	1.3	9.2	9.2	8.5	9.3
March	29.41	29.82	28.82	42.9	53.7	57.0	59.3	40.6	50.0	73	32	40	39	39	91	60	0.252	0.244	0.244	3.60	0.69	0	7.8	9.1	8.8	8.8
April	29.54	29.87	29.15	41.9	55.7	56.8	60.4	39.4	49.9	75	33	39	38	38	89	53	0.238	0.235	0.237	4.14	1.34	0	7.4	7.8	8.3	8.0
May	29.49	29.87	29.08	47.1	63.5	68.2	70.1	45.8	58.0	86	39	44	44	44	89	50	0.290	0.291	0.297	1.74	0.73	0	5.6	5.4	5.5	5.9
June	29.43	29.69	29.09	54.3	70.7	73.4	75.7	53.4	64.6	99	43	51	51	52	89	54	0.376	0.393	0.394	4.04	1.68	0	6.7	6.3	6.3	6.7
July	29.50	29.72	29.26	56.9	76.0	81.2	82.7	55.6	69.2	94	47	52	54	52	85	47	0.397	0.421	0.396	0.07	0.07	0	3.3	2.5	1.6	2.8
August	29.49	29.71	29.27	54.5	75.9	81.4	82.8	52.5	67.6	98	44	50	50	49	84	42	0.359	0.370	0.357	0.14	0.08	0	2.8	2.2	1.5	2.5
September	29.48	29.86	29.20	52.2	69.1	74.6	76.7	50.1	63.4	101	38	50	52	50	91	55	0.360	0.387	0.373	1.95	0.92	0	4.7	6.4	2.9	4.8
October	29.49	29.80	29.25	49.8	63.9	68.3	70.3	47.2	58.8	84	39	49	52	52	96	66	0.347	0.391	0.385	2.17	0.82	0	6.3	5.4	5.5	6.8
November	29.46	29.81	29.07	48.2	54.4	54.9	57.2	44.9	51.0	69	36	45	47	46	90	76	0.299	0.320	0.315	8.41	1.82	0	7.9	8.0	8.1	8.9
December	29.55	30.02	28.72	44.3	47.7	49.1	50.5	41.7	46.1	64	31	41	41	42	89	79	0.261	0.263	0.272	4.83	1.83	2.4	8.4	9.2	8.4	9.0
Year	29.49	30.02	28.72	46.6	59.3	62.5	64.6	44.3	54.5	101	7	44	44	44	90	61	0.295	0.308	0.304	41.41	2.44	11.4	6.5	6.6	6.0	6.8

ROSWELL, N. MEX.

[$\phi=33^{\circ}24' N.$; $\lambda=104^{\circ}27' W.$]

January.....	26.29	26.73	25.84	27.2	41.3	46.5	50.5	22.9	36.7	66	10	15	17	15	60	43	0.085	0.098	0.088	0.11	0.11	0.1	5.1	5.1	3.5	4.5
February.....	26.36	26.86	25.78	34.0	48.7	55.4	59.4	29.4	44.4	79	14	21	19	20	60	32	0.115	0.106	0.112	0.21	0.14	0.8	3.8	4.5	4.2	4.2
March.....	26.35	26.69	25.97	36.8	52.0	56.9	59.5	34.2	46.8	77	25	27	24	22	68	39	0.149	0.136	0.131	1.43	0.83	T	4.4	4.5	4.1	4.7
April.....	26.25	26.66	25.87	48.5	69.3	73.6	76.3	45.2	60.8	93	28	26	22	19	45	19	0.145	0.123	0.106	1.25	1.23	T	2.4	3.1	2.9	2.9
May.....	26.30	26.70	25.98	57.7	76.3	79.9	83.0	55.5	69.2	98	41	43	42	38	61	36	0.297	0.287	0.255	3.88	1.79	0	3.8	3.7	3.9	3.7
June.....	26.32	26.52	25.98	64.3	83.7	88.2	90.9	63.0	77.0	98	50	53	49	44	69	33	0.416	0.365	0.306	0.91	0.86	0	2.1	1.5	2.7	2.0
July.....	26.38	26.58	26.20	67.9	87.8	91.1	93.6	66.5	80.0	102	59	56	53	48	68	33	0.455	0.410	0.347	0.94	0.85	0	1.5	0.5	2.1	1.5
August.....	26.39	26.57	26.17	68.2	87.2	89.6	92.6	67.0	79.8	101	62	56	57	53	68	38	0.459	0.465	0.404	0.33	0.23	0	2.7	1.8	2.9	2.5
September.....	26.42	26.75	26.23	62.3	79.8	79.5	85.1	60.4	72.8	98	48	56	54	52	80	42	0.456	0.430	0.414	3.51	1.86	0	2.8	2.5	4.0	2.9
October.....	26.41	26.78	26.07	50.7	70.8	71.8	76.2	48.0	62.1	91	36	41	42	40	72	39	0.270	0.276	0.266	0.63	0.40	0	3.1	2.7	2.9	2.7
November.....	26.43	26.79	26.02	37.3	56.2	57.4	62.5	33.2	47.8	77	18	26	27	28	65	34	0.147	0.153	0.162	0.08	0.08	0	1.3	3.1	3.0	3.0
December.....	26.43	26.77	25.99	31.0	47.3	48.6	53.5	27.5	40.5	80	15	27	29	30	86	54	0.147	0.164	0.166	0.17	0.09	0.2	3.4	4.7	3.9	4.6
Year.....	26.36	26.86	25.78	48.8	66.7	69.9	73.6	46.1	59.8	102	10	37	36	34	67	37	0.262	0.251	0.230	13.45	1.86	1.1	3.0	3.1	3.3	3.3

SACRAMENTO, CALIF.

[$\phi=38^{\circ}35' N.$; $\lambda=121^{\circ}30' W.$]

January.....	30.02	30.40	29.59	34.5	41.4	44.4	45.9	31.5	38.7	54	22	29	31	30	80	67	0.165	0.179	0.180	2.92	0.80	T	4.5	7.3	4.3	4.7
February.....	30.00	30.30	29.35	42.9	51.2	54.6	55.5	40.9	48.2	66	33	39	40	40	85	67	0.239	0.249	0.248	6.18	2.34	0.0	4.0	5.4	5.4	5.0
March.....	29.92	30.23	29.32	48.8	59.1	62.2	64.1	46.7	55.4	76	39	44	44	44	83	60	0.287	0.295	0.290	6.37	2.52	0	4.3	5.4	5.4	4.5
April.....	29.98	30.20	29.64	48.4	63.8	66.7	68.8	46.7	57.8	82	41	42	40	38	79	43	0.264	0.253	0.242	1.10	0.72	0	2.0	3.7	3.3	3.4
May.....	29.83	30.13	29.58	53.7	74.4	79.4	80.9	52.5	66.7	94	45	45	46	44	74	37	0.301	0.311	0.288	0.01	0.01	0	0.9	2.1	2.7	2.1
June.....	29.85	30.07	29.60	58.1	79.0	83.5	85.2	57.7	71.4	108	52	50	50	49	76	38	0.367	0.362	0.353	0.18	0.18	0	1.8	2.8	2.8	2.9
July.....	29.78	29.96	29.54	61.8	85.5	91.5	93.2	60.4	76.8	107	53	51	54	50	70	35	0.380	0.421	0.362	T	T	0	0.3	0.7	0.7	0.6
August.....	29.79	29.98	29.59	61.8	85.3	92.9	94.0	59.9	77.0	107	52	50	52	48	67	33	0.363	0.393	0.344	0	0	0	0.6	0.3	1.1	0.3
September.....	29.83	30.08	29.66	58.9	79.5	85.1	86.4	56.7	71.6	102	51	49	50	47	71	36	0.345	0.357	0.328	0	0	0	0.0	0.9	1.2	0.9
October.....	29.91	30.08	29.76	54.4	73.0	77.2	78.6	52.3	65.4	89	48	48	47	47	80	44	0.336	0.337	0.332	0.87	0.50	0	1.9	1.4	2.0	1.9
November.....	30.00	30.20	29.70	49.0	61.1	63.1	64.9	46.4	55.6	75	37	46	48	48	89	62	0.310	0.331	0.333	2.69	0.69	0	3.3	4.5	5.4	4.7
December.....	30.02	30.35	29.58	44.0	52.3	55.1	57.0	41.1	49.0	68	33	42	45	46	94	77	0.275	0.302	0.317	4.06	2.31	0	2.1	4.7	4.6	5.2
Year.....	29.91	30.40	29.32	51.4	67.1	71.3	72.9	49.4	61.1	108	22	45	46	44	79	50	0.303	0.316	0.301	24.38	2.52	T	2.1	3.3	3.2	3.0

ST. JOSEPH, MO.

[$\phi=39^{\circ}49' N.$; $\lambda=94^{\circ}51' W.$]

January.....	29.06	29.52	28.42	16.8	22.1	21.2	29.5	11.8	20.6	50	-2	12	13	14	82	66	71	0.083	0.085	0.084	2.59	1.58	0.5	5.3	5.4	4.0	5.3
February.....	28.99	29.65	28.10	23.4	30.1	30.1	35.5	19.8	27.6	54	4	17	19	22	76	61	70	0.099	0.106	0.121	0.89	0.71	5.7	4.5	5.4	4.9	5.2
March.....	29.05	29.38	28.18	33.0	42.0	42.4	46.5	30.9	38.7	72	20	26	28	31	76	58	64	0.145	0.164	0.182	1.23	0.75	1.3	6.4	5.9	6.5	6.5
April.....	28.83	29.29	28.29	45.5	57.1	58.2	62.5	43.3	52.9	82	31	39	40	40	80	56	54	0.251	0.257	0.265	2.01	0.54	T	5.7	6.0	5.7	6.1
May.....	28.92	29.19	28.64	58.4	71.6	71.7	75.9	56.4	66.2	91	40	53	54	56	82	56	59	0.417	0.434	0.463	3.93	1.68	0	5.3	5.2	4.2	5.0
June.....	28.91	29.25	28.55	66.3	79.6	80.5	84.0	63.8	73.9	103	50	61	61	61	83	55	54	0.548	0.549	0.560	1.64	0.48	0	4.9	4.7	3.5	4.6
July.....	28.93	29.14	28.59	71.1	86.8	87.5	91.7	69.3	80.5	100	60	64	64	64	78	49	48	0.596	0.608	0.603	7.89	3.01	0	3.0	2.4	3.0	2.8
August.....	28.95	29.16	28.70	73.4	88.1	88.4	92.9	72.1	82.5	102	64	66	67	67	79	51	50	0.650	0.672	0.658	8.24	2.51	0	2.7	3.2	2.1	2.5
September.....	29.01	29.38	28.71	60.3	77.7	77.6	83.2	58.6	70.9	99	37	51	52	51	73	42	40	0.406	0.416	0.407	0.82	0.40	0	3.3	2.6	2.0	2.5
October.....	29.00	29.56	28.50	48.2	61.7	59.8	66.8	45.5	56.2	89	24	39	40	40	72	46	50	0.260	0.266	0.259	1.26	0.68	T	3.3	4.1	3.2	3.9
November.....	29.08	29.62	28.48	33.0	43.5	41.4	47.7	29.5	38.6	79	4	25	26	27	73	54	57	0.142	0.158	0.156	1.22	0.59	6.1	2.9	3.7	3.8	3.9
December.....	29.10	29.43	28.69	26.1	30.7	31.0	35.7	22.3	29.0	55	2	22	22	23	86	71	72	0.130	0.128	0.134	0.75	0.54	1.1	5.3	5.8	4.2	5.9
Year.....	28.99	29.65	28.10	46.3	57.6	62.7	43.6	53.1	103	-2	40	40	41	78	55	57	57	0.311	0.320	0.324	27.47	3.01	14.7	4.4	4.5	3.9	4.5

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended December 31, 1937—Continued

ROSEBURG, OREG.

[H=479 ft.; H_b=509 ft.; h_t=45 ft.; h_r=41 ft.; h_a=76 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from																							
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
January	Mi. 4.5	SW.	Mi. 18	N.	0	14	4	6	7	9	11	0	9	2	4	6	21	16	13	13	7	0	11	2	5	0	24	0	0
February	4.4	SW.	24	SW.	0	10	5	3	2	4	21	4	5	2	1	2	25	23	18	5	4	0	16	6	0	0	3	0	0
March	4.3	N.	23	SW.	0	17	4	5	5	11	7	5	7	1	1	4	26	20	18	0	0	0	13	6	0	0	0	1	0
April	5.1	N.	21	W.	0	23	6	3	1	16	2	6	1	2	3	3	24	19	16	0	0	0	3	2	0	0	0	0	0
May	5.3	N.	28	S.	0	29	9	2	3	6	6	2	2	3	8	9	14	10	7	0	0	0	1	0	0	0	0	0	0
June	4.6	N.	21	SW.	0	17	6	2	3	4	10	5	11	2	8	3	19	14	12	0	0	0	6	1	0	4	0	2	0
July	5.7	N.	18	N.	0	35	8	0	1	1	0	2	10	5	18	11	2	2	1	0	0	0	1	1	0	4	0	2	0
August	5.0	N.	16	N.	0	30	7	2	2	1	3	1	10	6	22	4	5	3	3	0	0	0	1	1	0	8	0	0	0
September	4.2	N.	17	SW.	0	27	5	2	2	6	1	2	10	5	10	13	7	5	4	0	0	0	10	2	0	2	0	0	0
October	3.3	NW.	16	SW.	0	17	7	3	3	8	4	4	11	5	4	12	15	12	10	0	0	0	23	14	0	0	0	0	0
November	4.0	S.	18	SW.	0	7	5	7	10	13	6	0	8	4	2	4	24	22	18	0	0	0	17	8	0	0	0	0	0
December	4.2	S.	17	SW.	0	5	6	6	4	14	6	6	14	2	0	6	25	15	11	2	2	0	24	11	0	0	1	0	0
Year	4.6	N.	28	S.	0	231	72	41	43	93	77	36	98	39	81	77	207	161	131	20	13	0	126	54	5	18	28	5	0

ROSWELL, N. MEX.

[H=3,563 ft.; H_b=3,566 ft.; h_t=75 ft.; h_r=69 ft.; h_a=85 ft.]

January	7.6	S.	35	SW.	1	9	6	4	6	14	8	5	9	1	13	9	9	1	1	1	1	0	4	0	3	0	28	0	0
February	9.0	S.	37	NW.	2	6	6	3	1	16	4	8	12	0	14	7	7	4	2	2	2	0	1	2	1	0	16	1	0
March	10.0	S.	38	NW.	1	5	9	6	6	17	5	6	8	0	13	11	7	4	2	4	1	0	0	0	0	0	12	0	0
April	10.0	S.	43	NW.	3	5	3	2	4	16	8	10	10	2	20	8	2	2	1	1	1	1	0	1	0	2	1	1	0
May	8.4	S.	29	SW.	0	3	6	9	5	17	8	6	6	2	18	9	4	8	6	0	0	0	2	1	0	9	0	8	0
June	8.0	S.	25	S.	0	6	2	8	18	9	5	4	4	4	23	7	0	2	2	0	0	1	0	0	0	23	0	5	0
July	7.7	S.	35	NE.	1	5	3	3	8	25	2	3	10	3	26	5	0	4	2	0	0	0	0	0	0	23	0	8	0
August	7.2	S.	26	E.	0	3	3	9	15	13	4	5	7	3	22	9	0	3	2	0	0	0	1	0	0	23	0	5	0
September	6.7	S.	31	W.	0	3	3	5	12	18	1	7	8	1	18	10	2	11	7	0	0	0	0	0	0	4	0	11	0
October	7.3	S.	30	NW.	0	6	3	5	7	19	3	3	12	4	20	7	4	6	4	0	0	0	0	0	0	1	0	3	0
November	6.9	S.	34	NE.	1	10	6	3	3	22	3	1	11	1	16	14	0	1	1	0	0	0	1	0	0	0	14	1	0
December	7.1	S.	34	NE.	1	8	7	8	4	14	6	7	6	2	12	11	8	2	2	3	1	0	5	3	0	0	25	0	0
Year	8.0	S.	43	NW.	10	69	59	65	89	200	57	65	103	23	215	107	43	48	32	11	6	4	13	7	4	85	96	43	0

SACRAMENTO, CALIF.

[H=25 ft.; H_b=66 ft.; h_t=92 ft.; h_r=83 ft.; h_a=115 ft.]

January	8.7	NW.	26	NW.	0	11	2	1	10	18	2	1	15	2	13	7	11	15	12	4	1	0	3	2	0	0	12	0	0
February	7.1	N.	25	SE.	0	9	2	3	11	6	7	2	14	2	12	5	11	11	8	0	0	0	3	0	0	0	0	0	0
March	7.0	S.	25	SE.	0	5	5	2	14	19	7	5	4	1	15	10	6	14	11	0	0	0	3	0	0	0	0	0	0
April	8.1	S.	27	NW.	0	7	1	1	9	15	11	3	13	0	18	5	7	5	5	0	0	1	0	0	0	4	0	0	0
May	7.9	S.	29	NW.	0	2	4	0	7	15	16	3	15	0	22	9	0	1	0	0	0	0	0	0	0	9	0	0	0
June	7.9	SW.	20	SW.	0	2	2	1	12	14	20	1	8	0	18	10	2	1	1	0	0	0	0	0	0	23	0	1	0
July	7.9	S.	18	S.	0	0	1	1	5	28	18	1	8	0	29	2	0	0	0	0	0	0	0	0	0	23	0	1	0
August	7.0	S.	18	S.	0	2	0	0	8	33	9	6	4	0	30	1	0	0	0	0	0	0	0	0	0	24	0	0	0
September	6.8	S.	23	S.	0	2	0	0	12	24	10	5	6	1	24	6	0	0	0	0	0	0	0	0	0	11	0	0	0
October	5.5	N.	18	NW.	0	12	0	2	11	13	3	3	15	3	26	1	4	4	4	0	0	0	4	3	0	0	0	1	0
November	5.8	SE.	22	SE.	0	7	1	2	15	11	6	2	11	5	12	9	9	9	6	0	0	0	10	7	0	0	0	0	0
December	5.7	SE.	27	SW.	0	14	4	1	17	14	1	2	2	7	10	11	10	9	5	0	0	0	22	19	0	0	0	1	0
Year	7.1	S.	29	NW.	0	73	22	14	131	210	110	34	115	21	229	76	60	69	52	4	1	2	42	31	0	71	12	5	0

ST. JOSEPH, MO.

[H=957 ft.; H_b=967 ft.; h_t=11 ft.; h_r=3 ft.; h_a=49 ft.]

January	10.0	NW.	35	W.	1	4	7	5	11	7	3	5	20	0	11	9	11	8	6	12	4	0	4	0	17	0	31	0	0
February	10.2	NW.	32	NW.	1	7	0	3	7	9	4	7	19	0	13	4	11	6	3	11	4	0	3	0	11	0	24	1	0
March	9.0	NW.	27	N.	0	11	8	5	5	12	7	4	10	0	6	12	13	10	6	12	4	0	4	0	6	0	21	0	0
April	11.7	NW.	43	NW.	2	10	2	9	6	8	4	7	14	0	10	7	13	9	6	1	0	2	4	1	0	0	2	4	0
May	8.0	S.	30	W.	0	7	8	6	12	12	5	6	6	0	14	7	10	13	11	0	0	0	2	0	0	1	0	8	1
June	7.9	E.	27	W.	0	8	9	14	7	10	2	7	3	0	14	9	7	10	8	0	0	0	4	0	0	8	0	6	0
July	7.2	SE.	30	NW.	0	3	7	16	14	10	5	5	2	0	19	10	2	9	8	0	0	0	2	0	0	22	0	10	0
August	7.4	SE.	23	W.	0	1	7	13	21	12	6	0	2	0	23	6	2	6	4	0	0	0	2	0	0	23	0	8	0
September	7.9	S.	21	NW.	0	4	5	15	11	13	4	2	6	0	24	2	4	3	3	0	0	1	3	0	0	7	0	3	0
October	8.1	SW.	32	NW.	1	7	3	12	7	8	10	3	11	1	16	8	7	7	5	2	0	0	8	1	0	0	3	1	1
November	9.2	NW.	32	W.	1	6	4	4	5	16	6	3	16	0	17	6	7	7	5	9	5	0	2	0	8	0	17	0	0
December	9.0	NW.	27	NW.	0	2	5	3	8	12	8	8	16	0	9	8	14	9	4	7	3	0	15	8	10	0	28	0	0
Year	8.8	S.	43	NW.	6	70	65	105	114	129	64	57	125	1	176	88	101	99	69	54	20	3	53	10	52	61	126	41	2

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

ST. LOUIS, MO.

[$\phi=38^{\circ}38' N.$; $\lambda=90^{\circ}12' W.$]

Month	Pressure			Temperature								Moisture															
	Extremes			Mean				Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness							
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight			
	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>					
January	29.52	29.94	28.94	28.1	32.3	31.4	38.6	22.8	30.7	62	4	24	24	25	82	74	78	0.142	0.142	0.146	5.21	1.14	2.1	6.2	5.0	6.7	
February	29.43	30.06	28.70	29.8	34.7	35.2	42.1	25.0	33.6	65	9	22	22	23	71	59	61	0.130	0.128	0.132	1.52	1.90	1.4	6.5	5.7	5.0	
March	29.48	29.77	28.76	34.9	43.6	44.9	49.4	33.3	41.4	69	22	28	28	28	76	56	54	0.160	0.158	0.158	1.75	1.18	7.7	5.6	5.9	7.2	
April	29.28	29.81	28.80	48.6	57.2	59.3	63.8	46.1	55.0	89	35	41	43	43	77	61	59	0.275	0.293	0.297	6.03	2.56	0	7.0	6.5	6.6	
May	29.36	29.61	29.11	61.2	71.9	70.7	75.6	58.7	67.2	93	47	53	54	54	75	55	57	0.417	0.438	0.433	2.65	1.07	0	5.4	5.4	6.0	
June	29.34	29.68	29.03	69.8	79.8	79.7	84.1	66.8	75.4	98	55	62	62	62	77	57	57	0.564	0.569	0.566	5.84	3.67	0	6.5	5.2	4.9	
July	29.38	29.57	29.16	73.3	85.0	83.3	88.6	71.0	79.8	96	62	64	62	63	72	47	52	0.606	0.567	0.586	6.67	3.36	0	3.2	5.3	3.9	
August	29.40	29.59	29.19	74.8	87.3	86.6	91.4	73.2	82.3	97	68	66	65	65	75	49	50	0.648	0.625	0.625	1.57	0.57	0	3.6	4.1	3.5	
September	29.45	29.72	29.10	62.0	75.8	75.0	80.4	60.2	70.3	92	47	53	54	53	73	49	48	0.433	0.455	0.428	2.02	1.04	0	3.8	3.1	3.0	
October	29.42	29.92	28.77	50.3	60.8	60.4	65.7	48.4	57.0	89	32	41	41	41	72	51	51	0.281	0.283	0.280	3.51	1.18	T	5.0	4.6	3.8	
November	29.52	30.09	29.04	36.4	46.1	45.3	50.2	34.0	42.1	83	14	27	29	29	69	52	54	0.159	0.173	0.178	1.19	0.76	2.5	4.4	4.7	3.9	
December	29.54	29.95	29.11	29.7	33.9	33.8	37.5	26.4	32.0	59	6	24	26	26	80	73	74	0.146	0.160	0.154	3.91	1.87	4	7.1	6.9	7.3	
Year	29.43	30.09	28.70	49.9	59.0	58.8	64.0	47.2	55.6	98	4	42	42	43	75	57	58	0.330	0.333	0.332	35.87	3.67	14.1	5.4	5.2	5.2	5.3

SALT LAKE CITY, UTAH¹[$\phi=40^{\circ}46' N.$; $\lambda=111^{\circ}57' W.$]

January.....	25.65	26.05	25.17	10.9	18.4	16.5	23.3	3.1	13.2	36	-20	8	11	11	85	72	78	0.065	0.075	0.074	1.76	0.44	32.3	7.5	6.6
February.....	25.72	26.14	24.92	26.4	35.9	33.9	39.9	21.5	30.7	51	7	21	26	24	79	65	67	0.113	0.138	0.132	1.12	0.45	8.8	7.0	5.9
March.....	25.68	26.17	25.18	33.9	48.3	47.5	51.7	30.3	41.0	61	17	27	29	30	77	49	53	0.149	0.162	0.169	1.18	0.54	5.5	5.0	6.0
April.....	25.67	26.01	25.04	38.2	53.8	55.5	58.9	34.0	46.4	78	28	29	27	27	71	40	35	0.162	0.149	0.147	1.09	0.39	2.2	4.5	6.3
May.....	25.65	26.00	25.24	50.4	71.2	72.7	75.7	47.4	61.6	88	32	36	35	35	60	28	27	0.217	0.206	0.203	1.05	0.90	0	4.9	4.6
June.....	25.69	25.85	25.42	54.2	76.7	78.1	81.7	52.0	66.8	100	35	41	37	36	63	25	25	0.261	0.226	0.223	1.14	0.08	0	4.5	4.9
July.....	25.73	25.94	25.53	65.4	86.7	88.2	92.4	62.7	77.6	104	57	52	49	46	62	32	27	0.386	0.352	0.326	1.21	0.52	0	4.7	4.0
August.....	25.73	25.96	25.47	64.6	87.3	88.9	92.1	60.8	76.4	102	51	45	44	39	51	24	19	0.298	0.292	0.250	0.48	0.36	0	3.6	2.5
September.....	25.75	26.09	25.40	56.7	79.0	79.1	83.0	51.8	67.4	94	35	41	38	36	57	24	24	0.260	0.233	0.221	0.83	0.36	0	2.3	3.1
October.....	25.79	26.03	25.45	45.6	64.6	62.0	67.7	41.0	54.4	82	29	37	37	38	72	38	45	0.219	0.221	0.242	2.24	1.41	0	2.7	2.8
November.....	25.79	26.07	25.39	37.8	51.9	47.3	54.5	32.7	43.6	66	23	30	30	33	74	45	58	0.167	0.165	0.188	0.69	0.29	T	5.6	5.3
December.....	25.80	26.15	25.19	31.6	42.3	39.5	45.8	26.8	36.3	57	12	26	30	30	81	61	69	0.143	0.164	0.167	1.27	0.90	1.0	5.1	5.6
Year.....	25.72	26.18	24.92	43.0	59.7	59.1	63.9	38.7	51.3	104	-20	33	33	32	69	42	44	0.203	0.199	0.195	13.06	1.41	49.8	4.8	4.8

SAN ANTONIO, TEX.

[$\phi=29^{\circ}27' N.$; $\lambda=98^{\circ}28' W.$]

January.....	29.28	29.72	28.92	47.8	53.3	53.0	58.7	42.0	50.4	81	26	44	44	45	87	75	78	0.316	0.312	0.331	0.96	0.16	0.0	9.2	9.5
February.....	29.32	29.80	28.83	48.4	59.7	62.5	66.6	45.9	56.2	84	29	41	40	38	77	51	45	0.274	0.264	0.250	1.13	0.06	0	4.5	6.3
March.....	29.30	29.65	28.80	51.0	60.3	63.9	67.2	48.7	58.0	85	32	45	44	44	82	61	53	0.331	0.332	0.315	2.10	0.70	0	6.3	7.6
April.....	29.18	29.57	28.80	59.2	74.8	79.0	82.1	57.9	70.0	96	42	52	51	49	79	47	39	0.423	0.412	0.383	8.4	6.6	0	6.3	5.3
May.....	29.20	29.47	28.96	66.7	82.0	84.8	87.7	66.1	76.9	93	57	62	58	57	84	47	42	0.559	0.501	0.484	7.68	6.82	0	6.1	4.0
June.....	29.20	29.40	28.92	73.2	85.9	89.6	92.6	72.4	82.5	102	63	69	68	67	88	56	49	0.717	0.683	0.664	2.19	1.77	0	5.8	4.7
July.....	29.25	29.41	29.10	74.2	87.4	90.1	93.7	73.4	83.6	99	67	70	68	65	89	55	48	0.749	0.696	0.630	1.82	0.94	0	5.3	4.4
August.....	29.23	29.44	29.04	75.6	91.2	94.0	97.1	75.0	86.0	101	70	72	67	65	88	46	40	0.778	0.672	0.616	1.14	0.08	0	3.9	4.4
September.....	29.26	29.50	29.08	72.6	87.6	87.3	92.5	71.5	82.0	100	62	64	63	61	77	44	44	0.629	0.584	0.566	0.04	0.02	0	3.9	3.8
October.....	29.28	29.57	28.91	63.0	78.5	79.0	83.9	61.3	72.6	99	48	56	57	56	78	51	47	0.470	0.484	0.460	3.09	1.64	0	3.6	2.9
November.....	29.37	29.85	28.96	50.2	64.1	63.9	69.1	47.9	58.5	84	27	45	46	45	82	55	52	0.331	0.356	0.337	0.86	0.55	0	4.3	4.8
December.....	29.38	29.72	28.98	49.4	55.7	55.0	59.2	46.5	52.8	75	29	46	46	46	87	71	74	0.335	0.335	0.341	6.22	2.42	0	7.8	7.8
Year.....	29.27	29.85	28.80	60.9	73.4	75.2	79.2	59.0	69.1	102	26	56	54	53	83	55	51	0.493	0.469	0.447	26.07	6.82	0	5.6	5.5

SAN DIEGO, CALIF.

[$\phi=32^{\circ}43' N.$; $\lambda=117^{\circ}10' W.$]

January.....	29.97	30.20	29.64	44.9	54.9	54.0	56.6	41.9	49.2	61	30	36	37	38	70	52	56	0.215	0.225	0.236	1.52	0.44	0.0	4.3	4.1	4.7	4.5
February.....	29.97	30.18	29.59	50.1	58.6	57.8	61.1	47.7	54.4	69	41	44	44	46	80	62	66	0.289	0.297	0.311	4.22	2.90	0	4.8	5.4	5.6	5.5
March.....	29.90	30.10	29.52	52.1	61.6	60.9	64.1	49.1	56.6	77	44	45	47	48	80	60	64	0.307	0.324	0.337	2.65	0.92	0	4.7	4.5	4.8	4.3
April.....	29.89	30.06	29.73	54.3	63.6	63.6	66.8	52.6	59.7	76	50	48	40	49	80	62	62	0.337	0.363	0.353	2.13	0.08	0	5.5	3.8	4.0	4.3
May.....	29.82	30.01	29.59	58.4	64.8	64.0	66.9	57.3	62.1	78	54	54	54	54	84	69	71	0.414	0.422	0.418	3.32	1.16	0	8.4	5.6	6.4	6.6
June.....	29.83	29.97	29.68	61.0	68.2	67.5	69.7	60.1	64.9	84	57	57	57	57	87	69	70	0.467	0.471	0.472	0.01	0.01	0	9.2	2.5	2.7	4.7
July.....	29.81	29.97	29.64	64.9	71.2	69.7	72.9	63.8	68.4	85	61	61	61	61	87	72	75	0.537	0.547	0.538	1.16	0.16	0	9.4	3.9	4.1	5.3
August.....	29.81	29.96	29.68	65.3	71.0	70.3	73.4	64.1	68.8	79	61	62	62	62	88	74	76	0.549	0.559	0.563	0.00	0.00	0	9.8	2.6	2.7	4.4
September.....	29.80	29.96	29.66	65.2	72.7	71.4	74.9	63.8	69.4	90	60	61	61	62	88	68	72	0.542	0.546	0.549	T	T	0	7.1	2.1	3.1	3.5
October.....	29.84	29.95	29.71	59.7	68.9	67.4	70.9	58.4	64.6	80	54	55	58	57	87	68	72	0.441	0.475	0.472	T	T	0	4.3	2.1	2.3	3.5
November.....	29.95	30.05	29.77	55.8	65.4	65.2	66.7	53.4	60.0	71	48	51	53	55	86	64	78	0.382	0.401	0.439	0.02	0.02	0	6.1	4.1	5.1	5.2
December.....	29.94	30.15	29.77	54.6	66.0	64.0	68.5	52.0	60.2	78	47	43	46	49	68	54	62	0.292	0.333	0.365	1.06	0.59	0	2.9	4.7	5.6	5.1
Year.....	29.88	30.20	29.52	57.2	65.6	64.4	67.7	55.4	61.5	90	30	51	52	53	82	64	69	0.398	0.414	0.421	10.09	2.90	0	6.4	3.8	4.3	4.8

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

ST. LOUIS, MO.

[H=465 ft.; H_b=568 ft.; h_t=179 ft.; h_r=172 ft.; h_a=303 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temperature 32° or below		Electricity				
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest				Calm												
January	11.9	Mi. NW.	35	S.	2	13	6	6	4	13	7	2	11	0	8	7	16	13	12	6	1	0	13	7	11	0	27	2	0
February	14.8	NW.	39	NW.	6	5	1	1	4	11	9	3	22	0	9	7	12	9	4	13	5	0	5	2	6	0	22	1	0
March	11.5	NW.	32	SW.	2	14	3	2	3	5	6	9	14	0	8	10	13	7	6	8	2	0	1	5	0	16	0	7	0
April	13.5	S.	45	SW.	4	8	1	2	10	11	13	7	8	0	5	13	12	16	12	0	0	1	5	0	0	0	0	7	0
May	11.4	S.	43	SW.	2	6	7	7	8	13	8	6	7	0	10	14	7	10	7	0	0	0	0	0	0	3	0	6	0
June	10.2	SW.	43	SW.	3	5	10	8	2	8	16	3	8	0	9	14	7	14	10	0	0	0	4	0	0	6	0	10	0
July	9.9	SW.	29	SW.	0	3	6	5	7	14	20	3	5	0	13	16	2	9	4	0	0	0	1	0	0	16	0	9	0
August	9.2	S.	30	SW.	0	3	6	13	9	16	11	1	3	0	19	8	4	8	7	0	0	1	1	0	0	20	0	5	0
September	11.0	S.	29	SW.	0	5	10	7	7	14	9	1	7	0	16	9	5	5	4	0	0	0	0	0	0	2	0	4	0
October	11.1	W.	33	W.	1	6	4	12	7	5	9	12	7	0	13	7	11	8	8	2	0	0	5	2	0	0	0	2	0
November	12.4	W.	35	SW.	3	3	2	6	2	13	10	18	6	0	12	9	9	8	7	6	2	0	3	1	4	0	15	1	0
December	11.5	W.	28	W.	0	6	0	6	5	10	14	19	2	0	5	6	20	11	9	4	1	0	14	4	9	0	23	0	0
Year	11.5	S.	45	SW.	23	76	56	81	68	133	132	84	100	0	127	120	118	90	39	11	2	54	17	35	47	103	47	0	0

SALT LAKE CITY, UTAH¹[H=4,222 ft.; H_b=4,227 ft.; h_t=32 ft.; h_r=31 ft.; h_a=46 ft.]

January	8.4	SE.	28	SW.	0	6	0	1	14	15	6	4	16	0	4	10	17	16	9	21	16	0	11	4	25	0	31	0	0
February	9.0	SE.	33	S.	1	5	1	0	17	10	1	7	15	0	6	8	14	9	5	16	9	0	6	2	4	0	28	1	1
March	9.1	SE.	41	W.	2	5	5	4	14	14	3	1	15	1	9	8	14	9	7	8	3	0	2	0	0	0	21	1	0
April	10.1	SE.	38	S.	4	9	2	0	15	10	1	6	17	0	9	8	13	10	7	12	4	1	1	0	0	0	12	1	0
May	9.2	SE.	42	S.	1	8	1	5	20	9	1	2	15	1	12	9	10	5	2	0	0	0	0	0	0	0	0	3	0
June	9.3	SE.	49	W.	4	4	4	2	26	5	3	2	14	0	12	9	9	2	2	0	0	1	0	0	0	7	0	5	0
July	9.1	SE.	45	NW.	5	4	6	1	26	11	3	2	8	1	11	14	6	11	6	0	0	0	0	0	0	18	0	10	0
August	10.4	SE.	42	W.	2	5	2	3	25	10	2	0	14	1	20	6	5	6	3	0	0	2	0	0	0	23	0	6	1
September	9.7	SE.	44	W.	4	4	4	3	24	6	3	12	1	18	8	4	7	6	0	0	1	0	0	0	0	6	0	10	0
October	8.4	SE.	31	NW.	0	1	3	5	22	6	2	13	9	1	19	7	5	9	5	0	0	0	0	0	0	0	1	0	0
November	8.0	SE.	60	NW.	2	3	6	5	12	14	2	6	9	3	8	10	12	8	6	2	0	0	1	0	0	0	16	0	0
December	8.0	SE.	32	NW.	1	3	2	1	24	7	4	8	9	4	11	8	12	6	3	4	1	0	5	0	0	0	26	0	0
Year	9.1	SE.	60	NW.	26	57	36	30	239	117	31	54	153	13	139	105	121	98	61	63	33	5	26	6	29	54	135	37	2

SAN ANTONIO, TEX.

[H=659 ft.; H_b=693 ft.; h_t=111 ft.; h_r=103 ft.; h_a=301 ft.]

January	10.0	N.	33	SE.	1	18	16	15	5	3	0	2	1	2	0	4	27	22	9	0	0	0	0	7	1	0	8	1	0
February	11.7	NE.	41	SE.	2	14	10	8	5	9	7	1	2	0	8	9	11	6	1	0	0	0	10	3	0	0	1	1	0
March	12.5	NE.	32	SW.	1	12	20	8	12	5	3	1	0	1	3	12	16	9	8	0	0	1	11	2	0	0	1	6	0
April	12.4	SE.	42	W.	3	6	5	16	15	10	0	4	2	2	12	14	4	3	2	0	0	0	6	0	0	3	0	1	0
May	12.3	SE.	40	SE.	1	3	7	14	31	3	1	1	1	1	11	13	7	5	4	0	0	0	0	0	0	10	0	4	0
June	10.4	SE.	30	NE.	0	2	3	16	23	4	1	2	0	9	10	17	3	4	3	0	0	1	3	0	0	24	0	3	0
July	10.6	SE.	38	SE.	1	1	4	21	23	8	3	1	0	1	10	18	3	7	5	0	0	1	0	0	0	26	0	4	0
August	9.8	SE.	35	SE.	3	4	3	17	26	3	1	3	1	4	11	18	2	4	2	0	0	0	0	0	0	30	0	8	0
September	9.4	E.	30	NE.	0	8	8	23	9	5	0	3	2	2	14	12	4	2	0	0	0	0	0	0	0	20	0	3	0
October	10.7	NE.	32	NW.	1	14	11	7	10	9	5	5	1	0	19	7	5	3	3	0	0	0	6	1	0	6	0	3	0
November	11.6	E.	32	NW.	1	9	6	18	7	9	0	7	3	1	15	10	5	5	2	0	0	1	12	1	0	0	3	1	0
December	10.6	E.	32	N.	1	9	7	24	8	2	3	5	3	1	4	5	22	16	10	0	0	1	21	3	0	0	2	2	0
Year	11.0	SE.	42	W.	15	100	100	187	174	70	24	35	16	24	117	139	109	86	49	0	0	5	89	17	1	119	15	37	0

SAN DIEGO, CALIF.

[H=26 ft.; H_b=87 ft.; h_t=62 ft.; h_r=55 ft.; h_a=70 ft.]

January	6.6	E.	26	S.	0	3	7	14	3	1	8	14	12	0	14	9	8	14	9	0	0	2	0	0	0	0	1	0	0
February	6.7	NW.	24	S.	0	4	7	4	3	8	4	10	15	1	13	3	12	9	9	0	0	0	5	3	0	0	0	0	0
March	7.4	W.	28	S.	0	3	7	7	4	5	2	17	17	0	13	7	11	11	9	0	0	1	7	7	0	0	0	0	0
April	7.0	W.	22	W.	0	6	4	5	5	3	4	21	11	1	14	8	8	4	2	0	0	0	4	0	0	0	0	0	0
May	6.8	SW.	17	NW.	0	2	4	1	3	8	24	9	8	3	6	12	13	4	4	0	0	0	2	0	0	0	0	0	0
June	6.9	W.	18	NW.	0	5	3	7	1	7	11	18	8	0	13	12	5	1	0	0	0	0	3	1	0	0	0	2	0
July	7.0	W.	16	W.	0	7	1	0	0	3	13	27	10	1	11	12	8	2	1	0	0	0	4	0	0	0	0	1	0
August	6.6	NW.	18	W.	0	7	2	0	0	9	11	21	12	0	15	12	4	0	0	0	0	0	3	0	0	0	0	0	0
September	6.7	NW.	18	NW.	0	4	0	2	1	9	6	14	24	0	16	11	3	0	0	0	0	0	3	0	0	0	0	0	0
October	5.8	NW.	15	NW.	0	11	4	4	2	1	2	14	24	0	16	11	4	0	0	0	0	0	10	5	0	0	0	1	0
November	5.2	NW.	15	W.	0	9	6	9	2	1	5	8	20	0	10	11	9	1	0	0	0	0	7	2	0	0	0	0	0
December	5.2	NW.	22	N.	0	3	7	8	3	7	3	7	24	0	13	6	12	8	5	0	0	0	5	1	0	0	0	0	0
Year	6.5	NW.	28	S.	0	64	52	61	27	62	93	180	185	6	154	114	97	54	39	0	0	3	53	19	0	0	1	4	0

¹ Observations taken at airport.

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

SANDUSKY, OHIO																											
[ϕ = 41°25' N.; λ = 82°40' W.]																											
Month	Pressure			Temperature										Moisture													
	Extremes			Mean						Extremes				Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness			
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
January	29.47	30.02	28.80	31.3	35.2	---	42.3	26.1	34.2	63	15	27	28	---	82	75	---	0.157	0.162	---	6.58	1.71	5.1	7.8	8.0	---	7.7
February	29.30	29.89	28.49	27.8	34.1	---	37.9	23.4	30.6	68	12	22	25	---	78	68	---	.123	.144	---	2.41	1.59	2.1	8.2	8.2	---	6.9
March	29.34	29.73	28.80	28.9	35.9	---	39.4	27.0	33.2	55	13	24	24	---	82	62	---	.130	.131	---	1.82	.76	2.0	6.3	6.6	---	6.2
April	29.26	29.74	28.67	42.9	51.5	---	55.7	38.5	47.1	74	31	36	37	---	77	60	---	.219	.233	---	4.41	1.89	1	5.9	7.6	---	6.9
May	29.32	29.59	29.02	56.8	66.2	---	70.3	50.8	60.6	93	42	48	50	---	73	57	---	.344	.372	---	3.66	1.28	.0	5.2	6.1	---	5.9
June	29.28	29.63	28.92	66.5	73.8	---	77.1	61.3	69.2	88	53	59	59	---	78	62	---	.514	.515	---	12.51	5.95	.0	6.6	6.3	---	6.2
July	29.30	29.48	29.02	70.7	80.0	---	83.4	64.8	74.1	95	51	62	63	---	74	57	---	.573	.579	---	3.54	1.28	.0	4.8	5.5	---	5.1
August	29.38	29.62	29.14	70.7	81.8	---	84.2	66.7	75.4	96	60	65	66	---	82	61	---	.618	.654	---	3.03	1.23	.0	4.5	4.5	---	4.5
September	29.40	29.75	28.92	57.7	70.7	---	73.7	54.0	63.8	94	40	50	52	---	75	54	---	.385	.420	---	3.51	1.56	.0	4.7	4.5	---	4.8
October	29.33	29.89	28.65	46.8	55.8	---	59.5	43.2	51.4	87	30	40	41	---	78	60	---	.271	.288	---	3.29	2.06	.1	7.6	7.5	---	7.0
November	29.38	29.97	28.55	36.0	44.4	---	47.1	32.3	39.7	67	17	30	32	---	78	64	---	.173	.188	---	.99	.18	3.7	7.3	6.4	---	6.8
December	29.44	29.94	28.93	26.1	31.0	---	34.4	23.3	28.8	51	9	22	25	---	84	77	---	.122	.140	---	1.81	.48	2.5	7.5	7.5	---	7.6
Year	29.35	30.02	28.49	46.8	55.0	---	58.8	42.6	50.7	96	9	40	42	---	78	63	---	.302	.319	---	47.56	5.95	15.5	6.4	6.6	---	6.3

SANDY HOOK, N. J.

[$\phi=40^{\circ}28' N.$; $\lambda=74^{\circ}01' W.$]

January	30.23	30.78	29.55	38.7	40.8	41.1	45.3	35.4	40.4	63	28	34	35	36	82	79	82	.203	.212	.222	4.61	0.74	1.5	7.9	7.2	6.3	7.7
February	29.95	30.38	29.29	31.7	36.7	36.0	40.2	29.0	34.6	54	17	26	27	28	78	68	71	.146	.152	.153	2.26	1.26	4.2	5.6	6.5	4.1	6.5
March	29.89	30.42	29.40	34.0	39.0	37.9	42.2	31.8	37.0	58	22	26	31	29	72	73	71	.143	.177	.163	2.41	1.15	2.6	4.6	6.2	4.1	5.4
April	29.97	30.49	29.42	45.7	51.2	48.4	54.5	43.0	48.8	67	35	38	37	39	74	60	72	.233	.227	.244	3.75	1.53	.0	6.0	6.4	6.4	6.1
May	29.94	30.41	29.56	58.1	67.2	62.1	70.5	53.7	62.1	86	45	50	50	52	76	87	70	.372	.377	.397	1.94	1.10	.0	5.1	4.3	4.7	4.5
June	29.88	30.26	29.44	67.3	73.3	70.5	76.7	63.3	70.0	90	58	61	61	62	80	67	76	.537	.545	.568	3.86	1.22	.0	5.6	6.2	7.4	6.2
July	29.95	30.14	29.62	72.3	79.4	75.6	82.4	68.4	75.4	98	62	65	64	66	78	61	73	.620	.605	.649	1.71	.57	.0	4.5	5.4	5.7	4.7
August	30.04	30.29	29.76	72.6	79.0	75.2	81.9	69.2	75.6	92	61	68	68	69	86	70	82	.696	.684	.721	7.88	1.99	.0	5.4	5.0	6.1	5.2
September	30.04	30.50	29.55	62.4	68.7	65.9	72.3	59.8	66.0	91	50	56	55	56	79	64	70	.465	.458	.461	3.71	2.20	.0	2.8	4.1	2.6	3.5
October	30.02	30.60	29.26	53.0	58.0	55.6	60.4	49.6	55.0	75	38	46	45	45	77	63	69	.329	.325	.321	4.55	2.39	.0	5.9	5.5	4.4	5.8
November	30.04	30.59	29.35	42.7	48.6	46.7	51.6	40.2	45.9	65	30	35	34	36	75	59	67	.214	.209	.223	3.53	1.74	.1	4.5	4.9	4.0	4.8
December	30.10	30.55	29.28	33.5	36.7	36.3	40.2	31.5	35.8	61	20	25	26	27	70	64	67	.142	.149	.150	1.26	.44	T	6.2	5.2	4.0	5.6
Year	30.00	30.78	29.26	51.0	56.6	54.3	59.8	47.9	53.9	98	17	44	44	45	77	65	72	.342	.343	.356	41.47	2.39	8.4	5.3	5.6	5.0	5.5

SAN FRANCISCO, CALIF.

[$\phi=37^{\circ}47' N.$; $\lambda=122^{\circ}25' W.$]

January	29.91	30.23	29.54	41.0	45.3	47.1	48.6	38.6	43.6	55	30	35	34	34	80	64	63	0.210	0.199	0.206	5.26	1.89	0.0	4.4	5.0	4.6	4.7
February	29.89	30.15	29.28	46.3	52.5	53.6	55.3	44.5	49.9	65	40	41	40	42	82	65	64	.258	.255	.264	4.88	1.12	.0	5.1	5.6	5.7	5.8
March	29.82	30.11	29.24	50.4	57.6	57.0	60.7	48.9	54.8	76	44	46	46	44	86	68	66	.316	.318	.297	7.05	1.92	.0	6.4	6.1	5.8	6.3
April	29.91	30.10	29.59	49.9	58.1	56.9	60.4	48.6	54.5	73	46	44	46	46	82	64	67	.293	.310	.308	.86	.38	.0	3.9	3.9	3.6	3.9
May	29.79	30.06	29.64	51.2	60.8	58.7	64.0	50.3	57.2	77	48	46	47	47	84	62	67	.311	.323	.328	.06	.05	.0	4.2	3.7	3.4	3.7
June	29.80	30.02	29.57	56.0	64.9	63.4	67.7	55.0	61.4	82	48	52	52	53	88	65	69	.392	.394	.399	.59	.38	.0	6.6	4.3	4.5	5.1
July	29.76	29.92	29.49	55.2	62.2	61.5	64.4	54.2	59.3	77	51	53	54	54	92	75	76	.398	.415	.418	T	T	.0	6.7	3.9	3.8	5.2
August	29.76	29.90	29.60	54.7	62.2	61.2	64.6	53.2	58.9	79	50	52	54	54	92	74	76	.391	.412	.411	T	T	.0	6.3	1.2	1.5	3.2
September	29.78	29.95	29.63	56.4	65.6	63.0	68.4	54.4	61.4	89	50	54	54	54	92	68	74	.413	.417	.421	T	T	.0	5.8	3.4	3.4	4.7
October	29.82	29.97	29.68	57.6	67.8	65.8	70.8	56.0	63.4	87	50	53	54	54	87	66	68	.408	.426	.417	.90	.37	.0	3.7	3.1	3.2	4.0
November	29.90	30.09	29.65	54.3	61.6	60.8	63.7	52.8	58.2	74	49	51	52	52	89	71	75	.376	.387	.397	2.46	.65	.0	4.7	5.3	5.5	5.3
December	29.90	30.18	29.46	51.4	56.8	57.9	60.0	49.5	54.8	69	42	48	50	50	80	80	76	.338	.371	.359	3.73	1.93	.0	3.9	5.0	5.2	5.3
Year	29.84	30.23	29.24	52.0	59.6	58.9	62.4	50.5	56.4	89	30	48	49	49	87	68	70	.342	.352	.352	25.79	1.93	.0	5.1	4.2	4.2	4.8

SAN JUAN, P. R.

[$\phi=18^{\circ}28' N.$; $\lambda=66^{\circ}07' W.$]

January	29.94	30.09	29.81	73.8	76.9	-----	77.9	69.7	73.8	79	66	70	71	-----	88	84	-----	.733	0.767	-----	15.47	4.20	-----	6.6	6.4	-----	5.2
February	29.94	30.05	29.86	72.6	77.1	-----	79.1	69.2	74.2	86	66	69	71	-----	88	81	-----	.701	.756	-----	1.33	.35	-----	5.1	5.1	-----	4.9
March	29.90	30.06	29.74	75.8	79.3	-----	82.5	70.9	76.7	90	66	71	74	-----	86	82	-----	.763	.824	-----	.93	.44	-----	3.5	3.7	-----	4.1
April	29.91	30.03	29.80	77.8	80.3	-----	82.2	72.6	77.4	88	70	72	74	-----	84	81	-----	.795	.836	-----	1.34	.44	-----	4.4	4.8	-----	4.5
May	29.87	29.98	29.76	80.8	84.3	-----	86.5	75.1	80.8	92	73	73	74	-----	79	72	-----	.822	.839	-----	1.50	.38	-----	5.4	6.5	-----	5.2
June	29.95	30.05	29.85	82.4	83.6	-----	85.1	75.8	80.4	90	72	76	76	-----	80	77	-----	.882	.883	-----	3.83	1.57	-----	4.3	5.7	-----	4.9
July	29.94	30.08	29.85	82.2	83.4	-----	84.7	76.4	80.6	90	72	76	77	-----	82	80	-----	.901	.918	-----	5.76	2.60	-----	5.0	4.9	-----	4.

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

SANDUSKY, OHIO

[H=603 ft.; H_b=629 ft.; h_i=5 ft.; h_r=3 ft.; h_a=67 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow	Hail	Fog		Maximum temp.		32° or below	Thunderstorm	Elec- tricity		
																	0.01 inch or over	0.04 inch or over			T or more	0.01 inch or more melted	Light	Dense				32° or below	90° or above
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest				Calm	0.01 inch or over			0.04 inch or over	T or more	0.01 inch or more melted	Hail				Light	Dense
January	10.8	SW.	23	SW.	0	3	1	4	2	4	12	2	3	0	3	9	19	17	14	9	4	0	1	1	7	0	27	0	0
February	11.7	SW.	35	SW.	1	2	3	0	1	4	9	9	0	0	3	12	13	10	7	15	5	2	0	0	10	0	23	3	0
March	10.4	NW.	23	NE.	0	0	3	3	0	3	7	4	8	0	6	10	15	10	5	16	6	0	2	0	7	0	24	2	0
April	10.6	E.	30	SW.	0	0	3	6	2	3	9	2	2	0	6	9	15	14	9	2	0	0	2	0	0	0	4	2	0
May	7.7	SW.	26	NW.	0	5	2	3	2	9	6	2	2	0	4	16	11	11	9	0	0	0	0	0	0	1	0	5	0
June	7.6	SW.	21	NW.	0	7	2	3	1	5	7	2	3	0	6	13	11	15	12	0	0	1	0	0	0	0	0	9	0
July	7.4	SW.	30	NW.	0	4	1	1	0	8	12	3	2	0	8	17	6	12	9	0	0	0	0	0	0	7	0	11	0
August	6.5	NE.	25	SW.	0	2	3	3	1	9	8	3	1	1	13	10	8	11	7	0	0	1	0	0	0	4	0	8	0
September	8.1	S.	21	SW.	0	2	1	0	3	13	6	1	4	0	13	9	8	5	4	0	0	0	0	0	0	2	0	2	0
October	9.8	SW.	30	NW.	0	3	1	1	2	10	7	3	4	0	4	12	15	9	6	3	1	0	2	0	0	0	2	1	0
November	11.1	SW.	30	NW.	0	0	0	3	2	6	12	7	0	0	5	7	18	14	9	10	6	0	3	2	4	0	13	0	0
December	9.2	SW.	27	SW.	0	0	1	3	3	3	12	5	4	0	5	6	20	16	8	13	9	0	3	1	11	0	27	0	0
Year	9.2	SW.	35	SW.	1	34	21	30	19	77	107	43	33	1	76	130	159	144	99	68	31	4	13	4	39	14	120	43	0

SANDY HOOK, N. J.

[H=15 ft.; H_b=22 ft.; h_i=10 ft.; h_r=3 ft.; h_a=57 ft.]

January	15.1	NE.	41	SW.	5	8	14	2	6	2	13	12	5	0	5	5	21	15	15	3	2	0	20	7	0	0	9	0	0
February	16.4	W.	47	NW.	11	11	4	4	1	6	7	12	11	0	4	10	14	7	7	6	3	0	12	4	4	0	20	0	0
March	17.0	NW.	43	NW.	12	4	10	2	2	5	10	9	20	0	12	7	12	12	7	9	3	0	16	0	2	0	16	0	0
April	15.8	NE.	42	S.	10	9	9	9	5	10	4	7	7	0	7	11	12	14	11	0	0	18	2	0	0	0	2	0	0
May	11.8	S.	36	S.	4	7	1	3	6	19	8	16	2	0	12	12	7	11	7	0	0	18	1	0	0	0	1	0	0
June	10.7	E.	43	SE.	4	4	5	8	12	9	8	11	3	0	6	9	15	12	10	0	0	20	2	0	0	0	0	0	0
July	10.4	W.	32	NW.	1	3	6	9	5	13	11	13	2	0	14	5	12	8	6	0	0	22	0	0	4	0	2	0	0
August	10.9	S.	37	S.	1	4	10	7	7	14	13	4	3	0	11	9	11	15	13	0	0	24	0	0	2	0	13	0	0
September	12.9	SW.	52	N.	4	10	9	2	3	13	5	9	9	0	16	8	6	6	4	0	0	18	1	0	2	0	1	0	0
October	15.4	S.	44	S.	6	6	9	3	5	11	10	9	9	0	9	8	14	13	10	0	0	11	0	0	0	0	0	0	0
November	15.7	W.	41	SW.	7	3	4	4	1	9	12	14	13	0	13	6	11	8	5	1	1	0	12	1	0	0	4	0	0
December	15.1	W.	41	W.	3	6	6	5	1	3	9	15	17	0	10	6	15	7	6	7	0	15	1	4	0	13	0	0	0
Year	13.9	W.	52	N.	68	75	87	58	54	114	110	131	101	0	119	96	150	128	101	26	9	0	206	19	10	8	62	38	0

SAN FRANCISCO, CALIF.

[H=52 ft.; H_b=155 ft.; h_i=112 ft.; h_r=104 ft.; h_a=132 ft.]

January	7.3	SE.	23	N.	0	10	4	13	9	3	3	10	9	1	14	7	10	16	14	0	0	2	4	1	0	0	3	0	0
February	7.6	W.	30	S.	0	8	1	7	5	4	5	21	5	0	9	7	12	15	10	0	0	2	0	0	0	0	0	0	0
March	7.6	W.	23	W.	0	2	2	5	8	6	12	24	3	0	8	10	13	13	13	0	0	2	6	0	0	0	0	2	0
April	9.2	W.	25	W.	0	1	1	2	1	4	2	40	9	0	15	7	8	6	6	0	0	2	0	0	0	0	0	0	0
May	10.3	W.	27	W.	0	1	0	0	2	0	12	41	6	0	16	12	3	2	1	0	0	0	0	0	0	0	0	0	0
June	10.6	W.	26	W.	0	1	0	0	0	1	11	42	4	1	8	14	8	4	3	0	0	0	6	0	0	0	0	0	0
July	11.1	W.	25	W.	0	0	0	0	0	1	15	44	1	1	10	11	10	0	0	0	0	9	0	0	0	0	0	0	0
August	10.7	W.	26	W.	0	0	0	0	0	0	13	48	0	1	19	11	1	0	0	0	0	2	0	0	0	0	0	0	0
September	9.3	W.	24	W.	0	1	0	0	1	3	8	40	2	5	13	11	6	0	0	0	0	3	1	0	0	0	0	0	0
October	6.4	W.	22	W.	0	2	0	1	1	2	3	40	4	9	16	9	6	4	3	0	0	6	2	0	0	0	0	1	0
November	6.4	W.	27	SW.	0	2	0	4	4	9	10	20	2	9	10	9	11	9	7	0	0	3	0	0	0	0	0	0	0
December	5.7	N.	31	SW.	0	10	3	12	6	2	4	11	5	9	12	5	14	6	5	0	0	11	6	0	0	0	0	1	0
Year	8.5	W.	31	SW.	0	38	11	44	37	35	98	381	50	36	150	113	102	75	62	0	0	4	54	10	0	0	3	4	0

SAN JUAN, P. R.

[H=47 ft.; H_b=82 ft.; h_i=9 ft.; h_r=4 ft.; h_a=54 ft.]

January	18.2	E.	38	E.	12	0	0	26	5	0	0	0	0	0	5	21	5	28	26	-----	-----	0	0	0	0	0	0	1	0
February	10.7	E.	27	E.	0	0	6	3	12	4	2	1	0	0	6	17	5	11	9	-----	-----	0	0	0	0	0	0	0	0
March	11.2	E.	27	E.	0	0	0	14	10	7	0	0	0	0	13	16	2	8	5	-----	-----	0	0	0	0	0	0	0	0
April	11.8	E.	28	E.	0	0	2	16	5	5	0	2	0	0	6	21	3	13	10	-----	-----	0	0	0	0	0	0	2	0
May	9.0	SE.	26	E.	0	0	0	8	13	10	0	0	0	0	4	22	5	10	7	-----	-----	0	0	0	0	8	0	2	0
June	12.8	E.	29	E.	0	0	1	26	3	0	0	0	0	0	2	25	3	13	11	-----	-----	0	0	0	0	1	0	6	0
July	13.0	E.	34	E.	1	0	0	25	6	0	0	0	0	0	9	16	6	16	16	-----	-----	0	0	0	0	1	0	7	0
August	10.7	E.	34	E.	1	0	1	14	11	4	1	0	0	0	3	23	5	24	18	-----	-----	0	0	0	0	1	0	7	0
September	8.5	E.	24	NE.	0	0	2	6	8	10	3	0	1	0	14	15	1	13	10	-----	-----	0	0	0	0	1	0	6	0
October	8.8	E.	26	E.	0	1	0	3	6	18	2	1	0	0	14	14	3	17	12	-----	-----	0	0	0	0	0	0	1	0
November	8.2	E.	27	E.	0	0	0	3	8	13	5	0	1	0	5	21	4	19	17	-----	-----	0	0	0	0	0	0	3	0
December	13.4	E.	33	E.	1	0	0	3	12	5	6	4	0	1	0	21	10	19	16	-----	-----	0	0	0	0	0	0	0	0
Year	11.4	E.	38	E.	15	1	15	156	92	77	17	4	2	1	81	232	52	191	157	-----	-----	0	0	0	0	12	0	35	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

SANTA FE, N. MEX.
[$\phi=35^{\circ}41' N.$; $\lambda=105^{\circ}57' W.$]

Month	Pressure			Temperature								Moisture															
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness					
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.		Noon, local time		7:30 p. m.		7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In	In.	In.	°	°	°	°	
January	23.08	23.42	22.70	17.6	29.7	29.4	34.8	12.6	23.7	46	0	10	12	13	69	47	48	0.066	0.075	0.076	0.53	0.16	5.4	2.9	5.1	5.3	4.7
February	23.17	23.51	22.62	26.8	38.0	38.7	42.7	22.6	32.6	56	10	16	17	19	61	42	47	.090	.095	.109	.84	.41	4.8	3.0	5.2	4.9	4.5
March	23.15	23.44	22.82	30.0	42.3	44.1	48.1	27.3	37.7	62	20	21	21	21	67	45	43	.111	.114	.115	.69	.34	7.8	5.4	5.9	6.3	5.8
April	23.14	23.44	22.78	37.3	54.7	59.0	60.8	35.0	47.9	77	24	20	21	20	50	28	24	.107	.113	.107	.49	.47	3.5	3.1	3.8	4.9	4.1
May	23.24	23.52	22.86	48.2	66.0	66.3	70.9	46.6	58.8	81	35	34	35	35	60	35	36	.200	.211	.204	3.97	1.86	.0	3.7	4.6	5.8	4.8
June	23.30	23.45	22.96	54.5	73.2	73.2	77.4	52.8	65.1	92	40	39	40	39	57	33	34	.247	.257	.252	3.51	1.17	.0	3.8	4.3	6.1	4.6
July	23.38	23.54	23.26	58.7	77.5	77.0	82.1	57.6	69.8	90	50	46	48	46	65	36	36	.317	.330	.319	.71	.23	.0	3.0	4.9	6.7	4.6
August	23.38	23.54	23.19	60.1	79.2	78.5	84.1	58.4	71.2	91	53	46	46	46	62	31	33	.316	.308	.311	1.11	.33	.0	3.8	4.8	7.0	5.0
September	23.37	23.52	23.27	53.3	71.2	71.5	76.2	51.6	63.9	84	39	42	42	41	67	37	35	.274	.273	.263	2.71	.75	.0	2.6	4.4	4.7	4.0
October	23.32	23.53	23.02	42.7	60.1	60.4	64.8	40.5	52.6	73	32	31	31	32	65	36	37	.178	.178	.182	.65	.46	.0	3.1	2.8	3.5	3.2
November	23.26	23.56	22.97	33.1	49.2	47.4	53.8	30.5	42.2	65	20	21	21	21	60	32	35	.114	.111	.114	.12	.12	T	2.4	4.0	3.9	3.8
December	23.24	23.58	22.90	28.0	39.1	37.2	43.8	24.4	34.1	53	13	18	21	21	67	49	54	.100	.112	.115	.33	.20	1.4	3.5	4.5	5.0	4.8
Year	23.25	23.58	22.62	40.9	56.7	56.9	61.6	38.3	50.0	92	0	29	30	30	62	38	38	.177	.181	.181	15.66	1.86	22.9	3.4	4.5	5.4	4.5

SAULT STE. MARIE, MICH.

[$\phi=46^{\circ}30' N.$; $\lambda=84^{\circ}21' W.$]

January	29.39	30.08	28.44	15.3	19.2	19.6	27.3	9.3	18.3	38	-6	12	14	15	85	78	81	0.079	0.083	0.089	3.61	0.83	30.1	8.5	7.8	8.0	8.2
February	29.21	29.96	28.36	14.9	22.0	21.9	26.9	9.1	18.0	40	-12	12	16	17	85	75	82	.080	.093	.100	2.54	.68	21.8	7.4	6.8	6.7	7.3
March	29.38	29.72	28.79	17.0	25.1	23.9	28.7	13.7	21.2	37	-4	11	14	16	76	60	71	.074	.083	.090	2.24	.09	3.3	6.0	5.4	4.8	5.2
April	29.29	29.72	28.88	35.4	42.7	40.5	45.4	31.9	38.6	68	20	30	31	31	79	64	70	.168	.174	.172	2.32	.76	4.0	6.6	6.6	6.8	6.7
May	29.32	29.73	28.91	46.6	59.0	55.5	62.5	40.7	51.6	89	28	39	40	38	75	52	55	.244	.258	.244	1.61	.70	.0	5.0	5.9	4.9	5.3
June	29.27	29.59	29.00	55.7	66.0	62.4	69.5	48.4	59.0	84	39	48	48	47	77	55	58	.345	.349	.328	1.15	.52	.0	6.4	5.3	5.0	5.8
July	29.28	29.54	28.81	61.5	73.9	69.3	77.4	55.7	66.6	93	44	55	56	55	80	56	63	.442	.460	.451	4.22	1.90	.0	5.3	4.6	4.4	4.7
August	29.37	29.71	29.10	62.4	77.1	71.7	80.0	57.7	68.8	89	45	57	59	59	84	55	65	.478	.517	.507	1.08	.56	.0	3.4	4.0	5.1	4.1
September	29.37	29.76	28.71	50.7	61.3	57.3	64.1	47.4	55.8	82	37	46	47	48	86	61	72	.338	.357	.361	5.24	1.25	T	5.6	5.8	5.9	5.6
October	29.29	29.90	28.14	40.1	46.0	43.9	49.2	37.3	43.2	65	27	35	35	37	82	66	77	.214	.215	.232	3.33	.87	.9	6.8	7.3	6.8	7.6
November	29.25	29.82	28.46	31.6	35.9	34.9	39.0	28.5	33.8	57	10	28	29	29	84	75	78	.155	.162	.162	2.96	1.27	4.8	7.1	8.3	7.9	8.1
December	29.35	29.95	28.70	17.7	20.8	20.6	25.2	12.7	19.0	37	-4	16	16	18	91	80	89	.091	.092	.100	2.41	.37	38.0	8.4	8.5	9.0	8.6
Year	29.31	30.08	28.14	37.4	45.8	43.5	49.6	32.7	41.2	91	-12	32	34	34	82	65	72	.226	.237	.237	30.71	1.90	102.9	6.4	6.4	6.3	6.4

SAVANNAH, GA.

[$\phi=32^{\circ}05' N.$; $\lambda=81^{\circ}05' W.$]

January	30.12	30.38	29.86	59.1	67.2	62.1	71.2	56.9	64.0	82	43	57	58	58	93	74	88	0.482	0.507	0.505	1.84	0.72	0.0	7.4	8.2	7.0	7.9
February	30.00	30.42	29.52	47.6	57.7	54.2	62.8	44.8	53.8	76	34	41	41	42	78	58	66	.279	.283	.290	4.38	1.38	.0	6.2	5.8	5.2	5.7
March	29.96	30.41	29.57	50.9	65.0	59.4	68.8	49.1	59.0	80	31	44	45	46	78	50	63	.305	.319	.324	2.50	1.36	.0	5.1	4.8	4.1	5.0
April	29.93	30.37	29.57	59.3	73.2	66.7	76.2	55.8	66.0	91	44	54	54	54	82	51	65	.433	.424	.435	4.15	1.38	.0	3.2	4.2	4.1	3.7
May	29.94	30.15	29.74	69.1	81.1	74.1	84.1	64.8	74.4	95	56	62	60	63	77	50	70	.556	.523	.586	1.97	1.30	.0	3.2	4.5	4.6	4.1
June	29.91	30.09	29.56	76.1	87.2	79.6	90.6	72.2	81.4	96	68	70	69	70	82	56	74	.744	.721	.747	7.83	2.93	.0	5.1	5.4	7.2	5.5
July	29.96	30.17	29.74	75.9	86.2	80.2	89.9	72.7	81.3	97	68	72	71	72	87	62	78	.776	.708	.796	8.91	2.63	.0	6.1	6.5	6.8	6.2
August	29.99	30.18	29.85	76.8	86.0	80.0	89.2	73.6	81.4	93	67	73	72	73	89	63	80	.813	.775	.819	7.33	2.00	.0	4.9	7.0	6.4	6.1
September	29.95	30.22	29.62	70.8	81.4	75.8	84.6	69.0	76.8	94	58	67	66	68	88	62	77	.668	.654	.686	4.73	2.22	.0	5.3	6.2	5.3	6.1
October	29.96	30.29	29.57	59.5	72.0	66.3	75.2	57.7	66.4	92	36	54	56	57	83	60	74	.461	.492	.509	3.76	1.52	.0	4.5	5.5	4.1	5.3
November	30.03	30.55	29.48	49.2	63.6	56.9	67.0	47.3	57.2	81	24	44	48	48	83	59	72	.321	.368	.356	2.98	1.99	.0	4.7	4.1	2.9	4.4
December	30.11	30.40	29.71	42.8	56.7	50.8	61.1	41.0	51.0	73	18	37	42	41	80	59	69	.240	.287	.276	1.09	.87	.0	3.7	4.7	3.0	4.6
Year	29.99	30.55	29.48	61.4	73.1	67.2	76.7	58.7	67.7	97	18	56	57	58	83	59	73	.506	.509	.527	51.47	2.93	.0	5.0	5.6	5.1	5.4

SCRANTON, PA.

[$\phi=41^{\circ}24' N.$; $\lambda=75^{\circ}42' W.$]

January	29.37	29.94	28.72	32.8	36.8	36.7	42.4	28.4	35.4	66	77	27	28	28	78	71	70	0.155	0.163	0.160	4.18	0.93	4.0	8.0	8.2	6.6	7.5
February	29.11	29.57	28.52	26.6	33.9	32.6	38.6	22.2	30.4	59	12	20	20	19	74	57	56	.114	.116	.112	2.47	1.38	4.6	6.8	6.9	5.7	6.7
March	29.04	29.57	28.64	27.6	34.9	34.1	38.4	24.4	31.4	54	12	21	21	22	74	57	60	.112	.115	.119	2.18	1.78	9.1	6.1	7.1	5.0	6.4
April	29.13	29.58	28.64	42.0	50.6	49.2	55.8	37.7	46.8	79	28	34	33	33	74	54	56	.201	.193	.197	3.51	1.13	.1	7.0	6.7	7.0	6.5
May	29.11	29.53	28.79	54.9	67.8	65.7	72.8	48.8	60.9	90	36	45	46	45	71	48	51	.315	.319	.318	2.66	1.02	.0	4.7	6.0	5.3	4.8
June	29.07	29.42	28.69	64.8	75.2	72.2	79.5	58.9	69.2	93	51	57	56	58	76	54	62	.472	.464	.484	5.89	1.97	.0	5.6	6.7	5.9	5.7
July	29.13	29.32	28.83	66.9	79.3	76.6	84.0	61.9	73.0	94	49	60	61	62	80	55	61	.530	.551	.556	2.67	.98	.0	4.4	5.8	6.2	5.6
August	29.22	29.48	28.92	68.3	79.7	76.9	83.9	64.2	74.0	94	54	63	64	65	84	60	67	.586	.602	.617	6.43	2.92	.0	5.1	5.8	5.3	5.5
September	29.22	29.71	28.74	53.0	68.1	63.6	72.4	50.1	61.2	91	36	48	50	50	84	53	64	.352	.376	.387	1.42	.51	.0	4.0	4.8	3.7	4.3
October	29.17	29.76	28.44	46.1	54.6	51.6	58.9	41.9	50.4	79	24	40	40	41	81	60	68	.260	.268	.275	6.02	2.38	T	6.7	7.5	6.9	6.5
November	29.18	29.71	28.58	46.2	44.9	44.2	49.5	33.3	41.3	73	22	30	33	33	78	63	69	.173	.198	.198	1.53	.55	2.2	6.9	6.8	5.4	6.3
December	29.23	29.70	28.57	27.2	32.7	31.6	35.8	24.5	30.2	54	8	19	21	20	70	61	62	.109	.119	.125	1.95	.98	3.8	6.7	6.7	6.6	6.8
Year-----	29.17	29.94	28.44	45.5	54.9	52.8	59.3	41.3	50.3	94	8	39	39	40	77	58	62	.282	.290	.300	40.91	2.92	23.8	6.0	6.6	5.8	6.0

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

SANTA FE, N. MEX.

[H=6,994 ft.; H_b=7,013 ft.; h_t=38 ft.; h_r=31 ft.; h_a=53 ft.]

Month	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from												Precipitation	Snow		Fog		Maximum temp.		32° or below	32° or above	Minimum temperature or below	Thunderstorm	Elec- tricity	
	Average hourly ve- locity	Prevaling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora	
	Mi.		Mi.																											
January.....	5.7	N.	21	SE.	0	15	8	4	7	9	7	6	4	2	15	7	9	8	7	11	8	0	0	1	11	0	31	0	0	
February.....	7.1	N.	34	SW.	1	19	4	2	3	4	7	8	8	1	15	5	8	6	3	8	4	0	1	0	3	0	25	0	0	
March.....	7.2	N.	32	W.	1	12	7	11	8	7	4	11	2	0	10	10	11	7	5	12	7	0	0	0	2	0	27	0	0	
April.....	7.6	SE.	27	SW.	0	7	7	7	7	4	10	13	3	2	17	4	9	3	2	5	2	1	0	0	0	12	0	0		
May.....	6.7	SE.	20	S.	0	9	5	9	11	15	7	4	1	1	12	11	8	7	5	0	0	2	1	0	0	0	7	0		
June.....	6.3	E.	18	W.	0	1	3	22	9	6	10	7	2	0	13	10	7	7	6	0	0	0	0	0	1	0	11	0		
July.....	5.6	E.	24	NE.	0	5	11	19	5	8	3	7	4	0	13	11	7	7	5	0	0	0	0	0	2	0	11	0		
August.....	5.5	E.	22	SE.	0	5	6	19	15	8	4	4	1	0	8	18	5	11	5	0	0	0	0	0	2	0	14	0		
September.....	5.4	E.	18	W.	0	13	7	20	7	5	5	2	1	0	14	12	4	7	7	0	0	0	0	0	0	9	0			
October.....	5.5	E.	19	S.	0	5	6	9	9	11	9	7	4	2	18	7	6	3	3	0	0	1	0	0	0	1	1	0		
November.....	5.5	E.	26	W.	0	8	11	11	11	4	9	1	5	0	17	7	6	1	1	1	0	0	0	0	0	17	1	0		
December.....	6.2	N.	26	N.	0	22	12	6	6	4	3	5	3	1	12	8	11	3	2	5	2	0	1	2	1	0	29	0		
Year.....	6.2	E.	34	SW.	2	121	87	139	98	85	78	75	38	9	164	110	91	70	51	42	23	3	4	5	15	142	54	0		

SAULT STE. MARIE, MICH.

[H=607 ft.; H_b=614 ft.; h_t=11 ft.; h_r=3 ft.; h_a=52 ft.]

January.....	10.0	SE.	32	NW.	2	2	0	7	18	2	12	10	8	3	2	7	22	24	16	27	23	0	8	1	20	0	31	0	1
February.....	8.8	SE.	30	NW.	0	4	1	8	17	2	5	10	8	1	4	9	15	19	13	18	18	0	13	4	20	0	26	0	3
March.....	9.7	NW.	32	NW.	1	4	5	8	4	1	0	10	30	0	9	12	10	8	3	15	8	0	5	0	23	0	31	0	6
April.....	10.2	SE.	30	SE.	0	1	8	11	17	1	0	5	16	1	7	7	16	13	11	6	6	0	10	1	1	0	14	1	4
May.....	8.1	NW.	26	NE.	0	2	3	9	10	0	7	13	16	2	9	12	10	9	8	0	0	0	3	0	0	0	2	3	4
June.....	7.2	W.	24	SW.	0	2	1	6	10	1	6	17	16	1	9	11	10	4	4	0	0	0	6	2	0	0	0	3	2
July.....	6.5	NW.	21	NW.	0	3	4	7	13	2	6	8	18	1	11	14	6	10	7	0	0	0	10	1	0	2	0	9	1
August.....	5.7	SE.	20	NW.	0	3	2	7	20	4	11	4	9	2	15	12	4	7	4	0	0	0	17	2	0	0	0	4	1
September.....	7.0	SE.	24	NW.	0	8	5	6	16	3	5	1	14	2	11	6	13	14	11	1	0	0	14	3	0	0	0	5	1
October.....	9.1	SE.	35	NW.	1	6	5	7	15	5	6	5	13	0	3	9	19	15	14	7	2	0	14	5	0	0	10	1	3
November.....	10.3	SE.	38	NW.	2	6	4	1	18	0	12	6	13	0	3	6	21	14	8	14	6	1	12	1	9	0	19	0	1
December.....	8.5	SE.	27	NW.	0	4	12	7	17	0	10	5	5	2	3	3	25	25	17	29	20	0	11	3	25	0	31	0	0
Year.....	8.4	SE.	38	NW.	6	45	50	84	175	21	80	94	166	15	86	108	171	162	116	117	83	1	123	23	98	2	164	26	27

SAVANNAH, GA.

[H=42 ft.; H_b=65 ft.; h_t=73 ft.; h_r=71 ft.; h_a=152 ft.]

January.....	10.4	S.	25	SW.	0	9	11	6	5	20	8	0	3	0	2	9	20	12	8	0	0	0	13	8	0	0	0	0	0
February.....	11.8	N.	37	NW.	1	13	2	10	2	6	5	8	10	0	9	7	12	11	11	0	0	0	4	0	0	0	0	1	0
March.....	10.6	NW.	30	NW.	0	10	3	2	4	15	6	9	13	0	10	10	11	7	7	0	0	0	3	0	0	0	1	3	0
April.....	11.4	S.	41	SE.	2	0	3	2	4	21	8	12	10	0	16	7	7	8	8	0	0	0	0	0	0	1	0	5	0
May.....	9.9	S.	31	N.	0	9	0	7	9	25	4	6	2	0	14	12	5	4	3	0	0	0	4	0	0	5	0	4	0
June.....	9.3	SW.	51	NW.	2	5	0	2	4	21	15	12	1	0	2	23	5	10	10	0	0	0	0	0	0	18	0	13	0
July.....	9.1	SW.	30	NE.	0	4	2	4	5	16	12	18	1	0	3	17	11	15	13	0	0	0	0	0	0	14	0	16	0
August.....	8.6	S.	32	SE.	1	5	6	7	11	15	10	4	4	0	5	16	10	16	14	0	0	0	5	1	0	14	0	13	0
September.....	8.7	N.	26	E.	0	11	12	9	7	6	6	6	3	0	8	12	10	14	9	0	0	0	1	0	0	3	0	5	0
October.....	10.9	E.	36	NW.	1	7	9	12	4	5	7	12	6	0	14	3	14	9	9	0	0	0	5	3	0	2	0	3	0
November.....	10.2	E.	43	E.	1	9	8	16	7	2	4	5	9	0	14	5	11	9	4	0	0	0	3	0	0	0	4	0	0
December.....	9.3	N.	28	NW.	0	17	8	6	5	8	3	6	9	0	15	7	9	5	3	0	0	0	5	3	0	0	6	0	0
Year.....	10.0	S.	51	NW.	8	99	64	83	67	160	88	98	71	0	112	128	125	120	99	0	0	0	43	15	0	57	11	63	0

SCRANTON, PA.

[H=746 ft.; H_b=805 ft.; h_t=72 ft.; h_r=64 ft.; h_a=104 ft.]

January.....	6.4	SW.	26	NW.	0	12	7	4	3	5	22	0	8	1	2	12	17	19	17	12	6	0	7	1	3	0	23	0	0
February.....	7.2	NW.	26	NW.	0	12	5	0	3	5	14	3	14	0	3	12	13	8	8	14	4	0	4	0	7	0	26	0	0
March.....	7.9	NW.	22	NW.	0	17	4	1	1	3	10	3	23	0	8	7	16	13	9	15	8	0	0	0	6	0	28	1	0
April.....	8.0	NW.	30	NW.	0	14	5	7	3	3	12	1	15	0	5	10	15	14	12	5	2	0	1	0	0	0	7	3	1
May.....	6.2	N.	24	NW.	0	18	6	1	0	6	16	0	15	0	11	13	7	11	9	0	0	8	0	0	1	0	7	1	0
June.....	6.0	N.	24	NW.	0	16	9	2	4	8	10	1	10	0	6	15	9	12	10	0	0	0	7	0	0	1	0	7	0
July.....	5.3	N.	19	SW.	0	16	7	0	4	6	16	4	8	1	6	7	8	11	10	0	0	0	10	0	0	7	0	7	0
August.....	4.9	N.	25	NW.	0	16	9	6	5	3	13	2	8	0	7	16	8	14	10	0	0	0	8	0	0	6	0	11	1
September.....	5.4	N.	22	NW.	0	18	8	3	1	2	10	5	13	0	14	9	7	7	15	0	0	0	13	3	0	4	0	2	0
October.....	6.8	SW.	29	NW.	0	8	8	2	3	12	13	3	13	0	4	13	14	16	13	3	0	1	7	0	0	0	6	0	0
November.....	6.9	SW.	25	NW.	0	13	5	1	1	4	23	1	12	0	6	10	14	12	8	6	3	0	7	0	1	0	15	0	0
December.....	6.3	SW.	24	NW.	0	5	6	2	2	6	23	1	17	0	7	5	19	9	7	17	3	0	11	1	9	0	23	0	0
Year.....	6.4	SW.	30	NW.	0	165	71	29	30	63	182	24	156	2	79	139	147	146	118	72	26	1	84	5	26	19	123	38	3

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

SEATTLE, WASH.

[$\phi=47^{\circ} 36' N.$; $\lambda=122^{\circ} 20' W.$]

Month	Pressure			Temperature									Moisture														
	Extremes			Mean						Extremes		Dew point			Relative humidity		Vapor pressure			Precipitation			Cloudiness				
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°
January	29.93	30.41	29.32	30.4	34.0	34.1	36.2	27.2	31.7	43	16	22	23	24	71	63	65	0.124	0.127	0.131	2.59	0.57	10.9	5.4	6.5	7.1	6.4
February	29.77	30.18	29.10	38.5	43.4	44.6	46.5	36.3	41.4	60	29	34	35	35	83	73	70	0.196	0.206	0.205	6.78	1.59	8.2	8.9	7.9	8.6	7.7
March	29.82	30.25	29.35	44.8	51.2	53.8	55.6	42.2	48.9	70	36	39	39	38	81	64	59	0.240	0.238	0.236	2.28	1.66	0	7.6	7.5	7.9	7.7
April	29.88	30.21	29.33	44.6	51.7	52.8	55.7	42.6	49.2	66	88	39	38	38	82	63	60	0.242	0.234	0.234	4.56	1.53	0	8.2	8.1	8.5	7.8
May	29.92	30.26	29.54	49.4	59.9	63.2	65.4	48.0	56.7	81	43	44	42	42	80	55	48	0.284	0.274	0.270	1.57	0.40	0	6.5	5.9	5.3	6.0
June	29.85	30.17	29.47	55.6	65.9	69.0	71.4	54.6	63.0	86	50	50	50	49	83	60	54	0.363	0.363	0.355	3.15	0.58	0	6.5	5.8	5.0	5.6
July	29.95	30.16	29.69	57.4	67.0	74.0	75.3	56.3	65.8	89	53	52	53	52	83	61	47	0.392	0.400	0.390	0.69	0.27	0	4.8	3.8	2.3	4.1
August	29.92	30.18	29.58	57.7	66.0	70.7	72.8	56.0	64.4	84	49	53	52	52	83	61	54	0.399	0.385	0.394	1.23	0.71	0	6.3	5.2	5.0	5.6
September	29.91	30.37	29.45	55.4	63.7	67.4	68.5	53.5	61.0	92	44	52	52	52	87	68	60	0.386	0.396	0.396	2.43	1.46	0	5.4	5.1	4.7	5.6
October	29.89	30.30	29.49	51.8	58.7	61.3	63.7	49.7	56.7	73	43	49	50	50	92	75	68	0.355	0.369	0.368	1.87	0.80	0	5.8	5.6	5.8	6.4
November	29.80	30.23	29.33	47.3	51.0	50.7	53.4	44.3	48.8	68	33	43	44	44	87	78	77	0.282	0.289	0.285	8.32	3.20	4.0	8.1	8.3	7.3	8.3
December	29.89	30.51	29.01	43.8	46.5	46.5	49.0	40.8	44.9	56	30	39	40	40	84	78	79	0.247	0.251	0.253	8.49	3.31	1.0	8.1	8.3	7.6	8.4
Year	29.88	30.51	29.01	48.1	54.9	57.3	59.5	46.0	52.7	92	16	43	43	43	83	67	62	0.292	0.295	0.293	43.96	3.31	24.1	6.8	6.5	6.3	6.6

SHERIDAN, WYO.

[$\phi=44^{\circ} 48' N.$; $\lambda=106^{\circ} 57' W.$]

January	26.00	26.39	25.42	-2.9	8.8	7.1	14.3	-8.9	2.7	39	-20	-8	-1	-1	77	63	66	0.029	0.042	0.042	0.19	0.07	2.1	4.9	5.0	5.5	5.6
February	25.98	26.32	25.48	11.5	27.0	24.8	32.7	4.3	18.5	56	-23	5	14	15	78	58	65	0.058	0.085	0.088	1.45	0.46	18.0	5.9	6.2	6.2	6.2
March	26.11	26.43	25.61	20.9	36.5	37.2	40.9	17.6	29.2	56	-13	18	23	26	88	59	63	0.107	0.125	0.138	2.51	0.90	18.5	5.7	6.1	6.0	6.1
April	25.99	26.35	25.48	33.4	52.1	51.9	56.0	31.9	44.0	82	23	29	27	29	84	40	44	0.161	0.144	0.157	1.24	0.48	6	5.2	5.8	5.8	5.6
May	26.07	26.49	25.61	47.4	65.7	66.7	70.7	43.4	57.0	91	31	37	36	37	69	36	38	0.221	0.214	0.224	2.39	1.49	0	5.3	5.4	5.7	5.5
June	26.10	26.35	25.79	60.2	69.1	69.1	73.2	47.1	60.2	94	33	44	46	47	82	47	48	0.296	0.321	0.326	2.43	1.15	1.5	5.4	6.2	6.7	6.1
July	26.13	26.33	25.88	68.6	80.3	80.5	84.9	56.0	70.4	103	47	53	52	54	84	42	45	0.410	0.402	0.427	1.78	0.76	0	4.5	4.4	5.5	4.4
August	26.10	26.41	25.82	64.4	84.2	83.2	89.5	51.6	70.6	101	41	43	40	45	69	23	28	0.281	0.261	0.305	0.03	0.02	0	3.3	2.3	4.7	3.2
September	26.15	26.53	25.85	46.7	72.2	71.1	77.4	44.0	60.7	94	27	42	41	42	83	36	38	0.268	0.265	0.276	0.50	0.47	0	4.3	3.6	4.0	3.9
October	26.14	26.47	25.72	37.0	60.8	56.6	64.5	33.9	49.2	86	26	32	32	34	83	39	46	0.183	0.185	0.198	0.95	0.51	0	3.3	4.2	4.4	3.9
November	26.12	26.54	25.60	25.7	39.5	36.8	44.1	20.6	32.4	65	-6	21	24	23	82	55	59	0.114	0.128	0.126	7.70	2.20	8.2	5.6	7.5	6.4	6.9
December	26.10	26.61	25.65	18.5	28.8	25.3	34.5	11.2	22.8	55	-13	12	18	18	78	63	72	0.083	0.105	0.104	1.06	0.50	9.1	5.9	7.4	7.1	7.0
Year	26.08	26.61	25.42	33.4	52.1	50.9	56.9	29.4	43.1	103	-23	27	29	31	80	47	51	0.184	0.190	0.201	15.23	1.49	58.0	4.9	5.3	5.7	5.4

SHREVEPORT, LA.

[$\phi=32^{\circ} 30' N.$; $\lambda=93^{\circ} 40' W.$]

January	29.80	30.16	29.33	47.2	51.6	52.0	57.5	42.9	50.2	77	29	44	45	45	90	81	80	0.319	0.330	0.328	8.39	2.36	0	8.8	9.3	8.3	8.7
February	29.82	30.33	29.27	45.5	55.5	55.8	60.2	42.0	51.1	81	32	37	36	35	73	52	48	0.250	0.249	0.228	2.28	1.10	0	5.8	6.1	4.5	5.3
March	29.80	30.14	29.31	47.3	57.2	58.3	63.0	45.9	54.4	78	33	40	41	42	78	57	57	0.269	0.271	0.283	5.26	1.35	0	6.5	5.2	5.5	5.7
April	29.66	30.07	29.29	57.5	71.6	72.6	76.7	56.5	66.6	84	41	51	51	54	81	52	54	0.407	0.423	0.443	2.43	1.20	0	4.6	4.8	4.4	4.6
May	29.70	29.91	29.49	67.2	81.6	82.4	86.3	65.7	76.0	93	54	62	59	59	83	48	47	0.559	0.514	0.513	0.98	0.30	0	5.1	3.5	3.4	4.1
June	29.68	30.00	29.37	75.5	87.4	87.3	91.9	72.8	82.4	101	64	70	69	69	84	56	57	0.732	0.706	0.718	3.47	1.20	0	4.2	5.6	4.0	4.5
July	29.73	29.92	29.58	75.6	88.5	87.8	93.2	73.9	83.6	100	68	71	71	70	86	57	57	0.760	0.756	0.727	1.42	0.61	0	4.9	6.1	5.0	5.3
August	29.72	29.96	29.56	76.2	89.9	87.8	94.2	74.5	84.4	104	69	72	72	71	88	56	59	0.794	0.773	0.753	3.02	1.58	0	3.6	5.2	4.7	4.4
September	29.74	30.02	29.56	69.0	83.7	81.8	88.3	67.5	77.9	100	52	64	62	63	83	50	54	0.611	0.579	0.595	3.34	2.64	0	3.8	3.7	3.5	3.8
October	29.76	30.08	29.36	57.9	72.4	70.3	76.3	56.1	66.2	90	36	53	53	53	84	53	58	0.429	0.435	0.440	4.96	2.97	0	5.5	2.8	3.2	3.2
November	29.86	30.36	29.40	46.9	59.0	56.7	62.9	44.3	53.6	79	24	41	42	42	81	56	61	0.284	0.287	0.294	7.41	3.86	0	5.4	5.5	3.8	4.9
December	29.88	30.28	29.26	46.3	52.4	52.9	57.2	44.0	50.6	72	20	42	43	44	83	74	72	0.301	0.323	0.327	7.63	2.03	0	7.1	7.5	7.3	7.4
Year	29.76	30.36	29.26	59.3	70.9	70.5	75.6	57.2	66.4	104	20	54	54	54	83	58	59	0.476	0.470	0.471	50.59	3.86	4	5.4	5.4	4.8	5.2

SIOUX CITY, IOWA

[$\phi=42^{\circ} 30' N.$; $\lambda=96^{\circ} 24' W.$]

January	28.86	29.31	28.08	3.8	9.4	9.2	15.8	-3.1	6.4	40	-16	1	5	5	87	81	82	0.049	0.057	0.055	1.64	0.83	17.9	5.4	5.6	5.1	5.5
February	28.78	29.45	28.04	14.6	22.1	23.8	28.3	10.3	19.3	49	-11	11	14	16	85	68	72	0.077	0.085	0.097	0.30	0.18	3.2	4.6	5.7	5.4	5.5
March	28.89	29.27	28.04	27.3	37.8	38.3	42.9	25.1	34.0	73	11	24	26	28	86	61	66	0.132	0.145	0.158	2.50	1.40	5.0	5.5	6.8	5.8	6.4
April	28.65	29.03	28.13	40.3	51.4	53.0	56.5	38.0	47.2	81	27	36	34	36	83	57	58	0.214	0.203	0.221	2.77	1.28	8.8	7.4	6.8	6.6	7.0
May	28.72	29.06	28.36	55.4	69.2	69.9	74.5	53.3	63.9	89	39	48	48	47	78	50	48	0.354	0.353	0.346	2.70	0.69	0	6.8	6.1	6.3	6.1
June	28.71	29.02	28.28	62.3	75.1	76.8	80.0	59.7	69.8	105	45	56	54	55	80	50	49	0.462	0.464	0.462	5.11	2.91	0	7.0	6.2	6.0	6.1
July	28.73	28.96	28.45	69.5	85.2	85.9	89.7	67.4	78.6	103	55	60	60	60	72	44	44	0.523	0.529	0.526	1.61	0.67	0	4.6	3.7	4.5	4.2
August	28.74	29.03	28.48	71.3	87.1	87.2	91.9	68.8	80.4	106	58	64	65	66	80	50	50	0.611	0.631	0.637	7.09	4.69	0	4.0	3.4	3.4	3.7
September	28.81	29.20	28.51	57.8	76.2	73.5	78.5	54.6	66.6	97	36	49	49	48	73	43	42	0.369	0.372	0.363	2.63	2.55	0	3.6	3.4	3.9	3.6
October	28.81	29.39	29.33	43.7	56.0	55.1	60.0	40.6	50.4	84	20	36	35	37	73	49	53	0.221	0.220	0.232	1.87	0.93	1.4	4.4	4.7	4.3	4.6
November	28.86	29.36	28.13	28.8	39.3	37.8	43.5	25.2	34.4	73	-9	21	23	23	73	53	56	0.124	0.131	0.128	0.25	0.15	4.4	4.2	5.3	5.6	5.1
December	28.88	29.26	28.39	19.4	27.9	27.3	33.3	15.0	24.2	59	-5	15	16	18	81	60	67	0.091	0.097	0.104	0.41	0.24	3.8	5.5	6.6	4.0	6.0
Year	28.79	29.45	29.04	41.2	53.1	53.2	57.9	37.9	47.9	106	-16	35	36	37	79	56	57	0.269	0.272	0.277	28.88	4.69	44.5	5.2	5.4	5.1	5.3

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

SEATTLE, WASH.

[H=14 ft.; H_b=125 ft.; h_i=90 ft.; h_r=83 ft.; h_a=321 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from											Precipitation		Snow			Fog		Maximum temp.		32° temperature or below		Elec- tricity	
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum	Thunderstorm	Aurora
January	9.3	SE.	41	SW.	4	14	5	3	25	7	0	1	6	1	10	4	17	15	13	14	12	0	3	0	6	0	23	0	0
February	11.3	SE.	45	S.	8	5	4	2	21	13	8	1	2	0	1	9	18	17	15	12	8	0	7	1	0	0	3	0	0
March	8.7	SE.	31	S.	0	9	2	4	21	8	8	5	5	0	0	15	16	19	15	0	0	4	0	0	0	0	1	0	0
April	11.3	SE.	49	SW.	6	3	0	4	21	15	8	7	2	0	0	13	17	18	14	0	0	0	0	0	0	0	0	0	1
May	9.4	N.	31	SW.	0	10	9	5	12	8	5	2	11	0	7	12	12	14	9	0	0	0	0	0	0	0	0	0	2
June	8.7	N.	42	W.	1	18	3	1	12	10	7	2	6	1	10	10	10	14	11	0	0	8	0	0	0	0	0	2	0
July	7.5	N.E.	21	S.	0	13	16	2	6	4	2	7	12	0	14	11	6	6	5	0	0	2	0	0	0	0	0	3	0
August	8.2	N.	33	SW.	1	11	8	0	9	12	2	4	15	1	19	11	10	7	3	0	0	5	0	0	0	0	0	1	1
September	6.7	N.	22	S.	0	19	2	5	7	14	3	4	4	2	7	12	11	6	4	0	0	13	3	0	1	0	0	0	0
October	7.6	SE.	36	S.	1	15	2	1	18	7	3	3	11	2	5	11	15	11	7	0	0	19	10	0	0	0	0	0	1
November	10.9	SE.	40	S.	4	11	1	7	24	12	4	0	1	0	2	6	22	24	20	2	2	5	1	0	0	0	0	0	0
December	10.8	SE.	43	SW.	7	8	1	2	20	18	5	3	4	1	1	8	22	21	15	6	4	1	11	4	0	0	1	1	0
Year	9.2	SE.	49	SW.	32	136	53	36	196	128	55	39	79	8	67	122	176	172	131	34	26	1	77	19	6	1	27	8	5

SHERIDAN, WYO.

[H=3,773 ft.; H_b=3,790 ft.; h_i=10 ft.; h_r=3 ft.; h_a=47 ft.]

January	5.2	NW.	24	NW.	0	6	6	5	5	11	1	3	24	1	8	13	10	9	2	15	9	0	2	1	28	0	31	0	0
February	5.3	NW.	33	NW.	1	5	8	4	6	14	5	2	12	0	5	11	12	12	8	17	12	0	1	0	15	0	28	0	0
March	5.7	NW.	25	SE.	0	4	4	4	6	16	6	4	18	0	8	10	13	10	9	13	6	0	1	0	7	0	31	0	0
April	7.6	NW.	30	SE.	0	3	2	10	4	7	5	3	25	1	7	13	10	12	8	9	2	0	0	0	0	0	17	0	0
May	7.4	NW.	30	E.	0	3	3	7	6	8	7	3	23	2	10	11	10	10	6	0	0	0	0	0	0	1	1	7	1
June	5.9	NW.	23	NW.	0	0	2	8	3	12	7	1	24	3	6	10	14	14	9	2	1	3	0	0	0	2	0	8	0
July	4.4	NW.	23	NW.	0	1	1	8	5	12	2	12	6	15	7	9	12	7	0	0	0	0	0	0	0	5	0	11	0
August	4.8	NW.	22	SW.	0	6	2	8	7	13	8	2	15	1	19	10	2	2	0	0	0	0	0	0	0	15	0	4	0
September	4.7	NW.	25	NW.	0	3	3	5	4	16	6	2	19	2	16	9	5	3	1	1	0	0	0	0	0	3	2	3	0
October	5.2	NW.	22	NW.	0	2	3	6	2	12	7	4	25	1	18	7	6	7	4	1	0	0	1	1	0	0	10	1	1
November	4.9	NW.	27	NW.	0	3	2	6	10	6	3	5	25	0	7	6	17	7	6	12	6	0	2	2	4	0	30	0	0
December	5.4	NW.	25	NW.	0	3	4	7	6	11	6	2	23	0	6	5	20	13	4	15	12	0	1	0	11	0	31	0	0
Year	5.5	NW.	33	NW.	1	39	40	78	64	141	73	33	245	17	125	112	128	111	64	85	48	3	8	4	65	26	181	34	2

SHREVEPORT, LA.

[H=197 ft.; H_b=249 ft.; h_i=92 ft.; h_r=90 ft.; h_a=227 ft.]

January	10.8	NE.	34	NW.	1	6	20	3	12	6	2	3	10	0	2	5	24	21	17	0	0	0	14	1	0	0	3	5	0
February	13.5	S.	37	NW.	4	8	14	2	5	15	5	0	7	0	9	9	10	6	6	1	0	0	3	0	0	0	0	2	0
March	11.4	NE.	28	NW.	0	10	16	4	7	14	3	3	5	0	11	8	12	14	11	1	0	0	5	0	0	0	5	0	
April	12.2	S.	40	SE.	3	2	5	3	10	22	5	4	9	0	13	9	8	7	7	0	9	0	5	1	0	0	0	5	0
May	10.1	S.	30	NW.	0	2	4	5	9	22	9	5	6	0	14	14	3	5	4	0	0	0	1	0	0	7	0	4	0
June	9.2	S.	43	N.	3	2	8	6	8	18	13	3	2	0	12	13	5	8	7	0	0	0	0	0	0	21	0	7	0
July	9.2	SW.	28	S.	0	1	4	7	16	16	14	4	0	0	10	10	11	7	5	0	0	0	0	0	0	25	0	11	0
August	8.2	SE.	31	S.	0	2	13	8	17	10	9	2	0	1	13	13	5	9	8	0	0	0	2	0	0	26	0	10	0
September	8.7	NE.	28	NE.	0	4	15	8	11	3	13	3	3	0	15	11	4	7	6	0	0	0	1	0	0	12	0	4	0
October	11.0	NE.	28	NW.	0	2	20	3	5	11	4	7	10	0	17	9	5	7	7	0	0	0	6	1	0	2	0	1	0
November	11.0	NE.	31	NW.	0	7	15	4	15	5	5	1	8	0	13	10	7	10	6	1	1	0	5	2	0	0	6	1	0
December	10.1	SE.	37	NE.	2	9	10	8	17	8	3	2	5	0	6	5	20	14	11	0	0	0	12	1	0	0	7	1	0
Year	10.4	S.	43	N.	13	55	144	61	132	150	85	37	65	1	135	116	114	115	95	3	1	0	54	6	0	93	16	56	0

SIOUX CITY, IOWA

[H=1,111 ft.; H_b=1,138 ft.; h_i=64 ft.; h_r=57 ft.; h_a=106 ft.]

January	11.6	NW.	38	NW.	3	6	2	6	13	8	1	1	25	0	13	7	11	6	6	21	6	0	0	0	0	0	31	0	0
February	12.3	NW.	38	NW.	4	8	2	2	11	6	2	0	25	0	11	5	12	5	2	9	5	0	1	0	15	0	27	0	0
March	9.1	NW.	34	NW.	1	15	7	10	7	6	4	2	10	1	8	8	15	7	6	14	4	0	7	0	6	0	26	0	0
April	12.3	NW.	45	NW.	4	11	5	9	7	5	1	1	21	0	4	11	15	10	8	5	4	1	3	0	0	0	10	4	0
May	10.3	S.	31	NW.	0	9	4	2	15	13	1	0	18	0	8	10	13	15	13	0	0	0	0	0	0	0	11	0	0
June	9.2	SE.	35	NW.	1	13	5	5	15	8	1	4	7	2	5	15	10	12	7	0	0	1	1	0	0	3	0	5	0
July	7.8	S.	29	S.	0	4	7	9	14	18	2	2	5	1	13	15	3	8	7	0	0	0	5	1	0	16	0	5	0
August	9.2	S.	53	NW.	1	4	5	6	21	20	2	0	3	1	16	11	4	11	11	0	0	0	4	0	0	21	0	15	0
September	8.9	S.	31	SE.	0	7	10	2	22	7	2	0	9	1	19	6	5	7	2	0	0	0	4	0	0	4	0	4	0
October	8.5	NW.	34	NW.	1	9	6	4	11	7	1	4	20	0	14	8	9	9	6	3	2	1	8	2	0	0	6	2	2
November	11.1	NW.	40	NW.	2	3	2	1	11	13	3	2	25	0	11	10	9	5	4	10	4	0	1	0	10	0	18	0	0
December	10.7	NW.	37	NW.	2	5	5	6	12	10	0	1	23	0	8	10	13	6	3	11	6	0	11	4	13	0	30	0	0
Year	10.1	NW.	53	NW.	19	94	60	62	159	121	20	17	191	6	130	116	119	101	75	73	31	3	45	7	72	44	148	46	2

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

SPOKANE, WASH.

[$\phi=47^{\circ}40'$ N.; $\lambda=117^{\circ}25'$ W.]

Month	Pressure			Temperature								Moisture														
	Extremes			Mean						Extremes		Dew point	Relative humidity		Vapor pressure	Precipitation		Cloudiness								
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum		7:30 a. m.	Noon, local time		7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	"	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>			
January	28.01	28.43	27.35	7.8	13.0	15.2	17.5	2.3	9.9	38	-19	5	8	9	88	80	76	0.055	0.063	0.066	1.94	0.32	36.0	6.8	6.1	5.5
February	27.87	28.27	27.39	25.0	32.6	34.6	36.2	21.1	28.6	48	-2	21	23	25	85	68	68	0.120	0.128	0.137	1.49	0.42	16.2	6.7	7.5	7.1
March	27.93	28.36	27.49	36.0	46.3	48.9	50.7	33.8	42.2	59	27	28	29	30	74	52	49	0.156	0.161	0.164	1.11	0.56	6	5.7	6.0	6.4
April	27.90	28.26	27.39	39.9	51.1	52.7	54.9	38.3	46.6	72	33	32	32	33	74	50	49	0.183	0.186	0.189	2.53	0.77	0	6.7	8.0	7.7
May	27.94	28.31	27.51	47.2	64.3	67.8	69.7	44.9	57.3	83	35	34	32	32	62	32	28	0.201	0.187	0.179	2.23	0.16	0	3.6	4.3	3.8
June	27.95	28.21	27.63	54.1	69.3	71.8	74.4	52.2	63.3	95	43	46	43	43	75	43	40	0.313	0.289	0.285	3.13	1.10	0	4.4	6.3	6.6
July	27.94	28.15	27.64	60.4	80.3	84.0	85.9	59.0	72.4	98	52	49	46	42	66	31	26	0.348	0.313	0.278	5.56	2.29	0	3.5	2.1	2.5
August	27.96	28.23	27.69	55.1	73.7	77.7	79.1	53.2	66.2	93	41	41	41	37	62	33	26	0.270	0.262	0.231	0.61	0.33	0	2.5	4.0	3.8
September	27.97	28.43	27.66	51.5	69.9	74.0	76.0	49.3	62.6	93	36	43	42	39	74	38	31	0.287	0.270	0.246	0.62	0.32	0	2.9	3.4	3.9
October	28.01	28.39	27.62	45.5	57.6	60.8	62.5	42.7	52.6	72	34	40	43	42	84	60	53	0.253	0.279	0.273	0.87	0.24	0	5.0	5.1	5.1
November	27.96	28.37	27.50	37.8	42.9	43.4	45.5	35.3	40.4	55	27	34	35	36	35	76	75	0.194	0.211	0.213	3.05	0.56	2.8	7.1	8.4	7.9
December	28.00	28.54	27.33	32.9	36.0	36.0	38.0	30.4	34.2	50	17	29	30	30	85	77	78	0.163	0.167	0.167	2.76	0.70	13.5	8.3	8.5	8.2
Year	27.95	28.54	27.33	41.1	53.1	55.6	57.5	38.5	48.0	98	-19	34	34	33	76	53	50	0.212	0.210	0.202	18.90	1.10	69.1	5.3	5.8	5.7

SPRINGFIELD, ILL.

[$\phi=39^{\circ}48'$ N.; $\lambda=89^{\circ}39'$ W.]

January.....	29.46	29.87	28.77	25.0	30.2	28.5	35.0	19.6	27.3	58	0	21	23	24	84	74	0.126	0.133	0.135	4.95	2.42	4.7	6.1	5.8	5.6	6.3
February.....	29.33	29.99	28.58	26.9	32.5	32.0	38.6	22.1	30.4	56	5	21	22	23	76	64	0.122	0.124	0.132	1.67	0.72	4.5	6.0	6.3	5.5	6.5
March.....	29.41	29.71	28.68	32.3	43.5	43.0	47.5	30.6	39.0	70	21	27	27	28	79	53	0.150	0.153	0.162	0.69	0.20	3.9	5.4	6.3	6.7	6.4
April.....	29.21	29.70	28.68	45.9	56.4	56.0	61.9	43.3	52.6	89	34	40	42	43	80	61	0.263	0.285	0.300	3.64	1.29	0	7.9	8.0	6.6	7.7
May.....	29.30	29.56	29.10	58.0	71.7	69.5	75.4	55.3	65.4	93	45	52	54	53	82	56	0.410	0.431	0.427	2.42	0.96	0	5.5	5.7	6.0	5.8
June.....	29.27	29.63	28.98	66.4	79.0	78.3	83.1	63.7	73.4	100	50	60	61	61	82	58	0.538	0.555	0.554	4.72	1.25	0	6.1	6.3	6.5	6.0
July.....	29.31	29.50	29.06	70.3	84.8	83.3	88.1	67.8	78.0	96	57	62	61	62	75	47	0.566	0.556	0.567	6.70	3.83	0	4.3	4.7	3.5	4.4
August.....	29.35	29.55	29.13	70.5	86.0	84.1	89.6	69.4	79.5	98	64	65	66	66	84	56	0.627	0.653	0.652	9.4	4.0	0	3.8	5.3	3.8	4.6
September.....	29.39	29.66	29.04	57.8	75.7	72.2	79.3	55.8	67.6	94	42	52	51	51	80	44	0.412	0.413	0.404	2.16	1.36	0	3.9	3.3	3.7	3.7
October.....	29.35	29.85	28.62	47.5	59.6	57.4	63.2	45.6	54.4	88	29	41	41	41	78	53	0.277	0.281	0.285	2.81	1.04	0	4.9	5.6	5.0	5.5
November.....	29.43	30.01	28.92	33.1	44.7	41.5	47.4	30.2	38.8	82	9	27	29	30	77	56	0.175	0.178	0.162	4.47	2.6	4.7	5.0	3.9	5.2	5.5
December.....	29.46	29.87	29.06	26.8	31.6	30.9	34.7	23.6	29.2	58	7	23	25	25	84	77	0.136	0.149	0.142	2.31	1.29	0	6.0	7.5	6.5	7.8
Year.....	29.36	30.01	28.58	46.7	58.0	56.4	62.0	43.9	53.0	100	0	41	42	42	80	58	0.315	0.326	0.328	34.63	3.83	15.7	5.4	5.8	5.3	5.8

SPRINGFIELD, MO.

[$\phi=37^{\circ}12'$ N.; $\lambda=93^{\circ}18'$ W.]

January.....	28.66	29.10	28.14	27.6	32.5	32.1	38.5	22.0	30.2	60	7	24	26	27	87	76	0.142	0.149	0.154	6.94	1.55	8.1	6.8	6.9	7.8	6.8
February.....	28.62	29.19	27.93	29.9	36.8	38.2	44.1	25.5	34.8	70	9	24	26	27	77	65	0.137	0.153	0.151	1.15	0.49	2.4	6.4	6.3	6.4	5.5
March.....	28.65	28.92	27.99	34.9	44.3	45.5	49.5	32.9	41.2	70	20	28	30	30	76	59	0.154	0.177	0.173	1.80	0.62	1.4	5.8	6.3	6.2	5.2
April.....	28.48	28.91	28.01	48.6	58.9	60.0	63.7	46.2	55.0	87	30	42	44	44	78	59	0.281	0.302	0.308	5.19	1.70	0	6.7	6.6	5.9	5.6
May.....	28.57	28.78	28.33	60.2	70.3	71.0	74.2	57.4	65.8	87	44	54	57	56	81	64	0.429	0.469	0.459	5.09	1.83	0	4.6	7.3	5.2	4.6
June.....	28.57	28.85	28.23	69.0	79.8	79.4	83.3	66.5	74.9	95	58	63	64	65	83	61	0.588	0.618	0.625	9.39	2.90	0	5.9	5.2	5.2	4.5
July.....	28.60	28.77	28.37	71.0	82.7	83.6	86.6	68.9	77.8	95	60	65	66	65	82	57	0.625	0.622	0.617	3.95	1.95	0	5.2	5.6	3.7	4.0
August.....	28.62	28.80	28.45	73.0	85.3	84.9	89.3	71.3	80.3	98	63	67	66	66	81	54	0.657	0.645	0.641	1.88	0.94	0	4.5	5.2	5.0	4.3
September.....	28.65	28.91	28.41	62.3	75.6	73.8	79.5	60.6	70.0	93	42	56	53	55	80	48	0.478	0.443	0.462	2.63	1.83	0	4.5	4.7	3.9	4.1
October.....	28.63	29.08	28.14	49.5	63.0	61.2	67.3	47.9	57.6	90	24	42	42	42	76	50	0.285	0.292	0.286	1.75	0.72	0	3.8	4.6	4.6	4.6
November.....	28.71	29.19	28.27	36.7	46.2	44.7	50.0	34.1	42.0	81	9	28	28	29	73	52	0.171	0.169	0.169	1.72	0.54	7.5	4.9	5.1	4.9	5.2
December.....	28.71	29.07	28.27	30.7	36.3	35.6	40.3	27.0	33.6	60	6	28	30	30	87	78	0.167	0.181	0.176	2.38	0.87	1.0	6.7	7.1	6.3	7.3
Year.....	28.62	29.19	27.93	49.4	59.3	59.2	63.9	46.7	55.3	98	6	43	44	45	80	60	0.343	0.352	0.352	43.87	2.90	20.4	5.5	5.9	5.4	5.1

SYRACUSE, N. Y.

[$\phi=43^{\circ}03'$ N.; $\lambda=76^{\circ}09'$ W.]

January	29.56	30.24	28.86	31.5	35.3		41.7	25.8	33.8	64	9	25	24		76	65	0.146	0.143		3.68	0.69	10.9	7.5	8.3		7.9
February	29.32	29.88	28.65	26.5	31.6		37.3	22.2	29.8	58	5	20	19		76	61	.114	.109		3.14	1.66	12.4	7.3	7.1		7.4
March	29.28	29.81	28.83	26.1	30.5		34.3	22.9	28.6	44	9	19	20		73	66	.104	.110		2.68	0.57	25.0	7.0	7.5		7.4
April	29.34	29.83	28.87	42.2	48.3		53.3	37.7	45.5	70	29	33	33		72	58	.194	.190		3.51	1.19	6.4	7.6	7.6		7.1
May	29.34	29.77	29.01	56.3	64.6		69.1	49.6	59.4	88	40	46	46		70	55	.314	.322		3.23	1.07	0	6.2	6.2		5.9
June	29.28	29.61	28.95	66.2	71.4		76.0	58.5	67.2	87	49	55	56		70	62	.443	.461		6.59	2.20	0	6.3	6.8		6.3
July	29.33	29.51	28.99	70.5	79.1		82.9	64.0	73.4	93	55	59	59		68	51	.511	.509		2.85	1.39	0	4.4	5.7		5.0
August	29.43	29.68	29.05	70.8	80.9		84.5	66.4	75.4	94	56	62	63		76	56	.572	.588		5.83	1.64	0	5.3	5.8		5.8
September	29.43	29.92	28.87	56.6	67.3		70.5	52.2	61.4	91	40	49	48		77	52	.367	.365		1.39	.85	0	4.7	5.9		5.0
October	29.37	29.99	28.67	46.6	53.4		57.5	43.2	50.4	86	29	40	40		78	61	.262	.260		0.83	2.55	T	7.4	8.1		7.8
November	29.39	29.95	28.81	38.7	43.9		47.4	35.6	41.5	67	24	30	31		71	61	.172	.180		2.66	.98	3.7	8.9	8.6		8.5
December	29.44	29.99	28.70	26.8	30.4		34.3	23.5	28.9	47	9	21	21		77	69	.115	.117		2.74	.98	10.0	8.0	7.5		7.7
Year	29.37	30.24	28.65	46.6	53.1		57.4	41.8	49.6	94	5	38	38		74	60	.276	.280		45.13	2.55	68.4	6.7	7.1		6.8

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

SPOKANE, WASH

[H=1,879 ft.; H_b=1,929 ft.; h_t=101 ft.; h_r=94 ft.; h_s=110 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from											Precipitation	Snow		Fog	Maximum temp.	32° or below	32° or above	Minimum temperature or below	Thunderstorm	Electricity			
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Clear	Partly cloudy	Cloudy	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora
	Mi.		Mi.																										
January	5.8	NE.	26	NE.	0	14	13	15	1	7	1	5	6	0	8	8	15	19	15	24	19	0	21	0	30	0	31	0	0
February	7.5	S.	27	S.	0	8	9	4	2	20	8	1	1	3	5	7	16	13	8	13	12	0	8	1	6	0	25	0	0
March	7.1	E.	23	NE.	0	3	18	17	1	13	3	3	1	3	7	6	18	8	7	2	1	1	2	2	0	0	10	1	2
April	8.8	S.	28	S.	0	1	5	5	1	27	15	3	3	0	2	14	14	17	14	3	3	3	0	0	0	0	0	2	0
May	7.9	S.	24	SW.	0	2	14	6	1	18	15	5	1	0	14	11	6	4	2	0	0	0	0	0	0	0	0	0	1
June	6.6	S.	30	SW.	0	4	13	8	2	16	4	5	8	0	8	11	11	12	9	0	0	1	0	0	0	3	0	5	0
July	6.2	S.	27	S.	0	2	8	4	1	23	14	2	6	2	22	5	4	5	3	0	0	0	0	0	0	11	0	6	0
August	6.7	S.	22	SW.	0	4	7	2	3	28	13	4	0	1	19	4	8	6	4	0	0	0	0	0	0	3	0	1	3
September	5.1	S.	23	SE.	0	10	14	1	2	14	8	5	5	1	16	8	6	4	3	0	0	0	3	1	0	2	0	2	0
October	5.6	S.	21	S.	0	4	8	11	1	15	9	7	6	1	10	9	12	9	6	0	0	1	11	6	0	0	0	1	3
November	7.4	S.	28	SW.	0	15	12	2	1	25	2	1	2	0	1	4	25	18	15	3	2	0	7	3	1	0	11	0	0
December	7.1	S.	25	S.	0	9	7	1	2	27	2	5	8	1	1	4	26	13	10	10	6	0	11	3	4	0	17	0	0
Year	6.8	S.	30	SW.	0	76	128	76	18	233	94	46	47	12	113	91	161	128	96	55	43	6	63	16	41	19	94	18	9

SPRINGFIELD, ILL.

[H=598 ft.; H_b=636 ft.; h_t=5 ft.; h_r=3 ft.; h_s=191 ft.]

January	12.3	SE.	34	SW.	1	9	5	8	11	7	5	10	7	0	11	4	16	13	11	9	4	0	14	9	13	0	29	0	0	0
February	13.9	NW.	38	W.	2	6	0	2	9	8	6	8	17	0	7	6	15	12	7	13	8	0	4	3	8	0	23	2	0	0
March	11.5	N.	28	E.	0	15	3	8	5	5	9	6	11	0	8	12	11	7	4	10	3	0	5	1	4	0	17	0	0	0
April	12.9	SE.	35	SW.	2	9	5	5	12	9	6	10	4	0	3	5	22	15	14	1	0	2	4	1	0	0	5	0	0	0
May	11.1	S.	27	S.	0	6	9	4	12	9	10	7	5	0	7	11	13	9	7	0	0	1	2	1	0	3	0	7	0	0
June	10.0	SW.	32	S.	1	10	9	4	5	12	10	2	8	0	5	15	10	14	12	0	0	0	0	0	0	5	0	9	0	0
July	8.9	S.	28	NW.	0	5	5	9	4	11	18	3	7	0	11	17	3	6	5	0	0	0	0	0	0	15	0	6	0	0
August	8.8	SE.	38	NW.	1	5	5	11	17	13	4	4	3	0	13	10	8	6	6	0	0	0	2	1	0	17	0	4	0	0
September	10.5	S.	25	NW.	0	7	8	5	11	18	3	1	7	0	16	8	6	5	4	0	0	0	0	0	0	4	0	3	0	0
October	10.8	NW.	35	NW.	1	12	5	7	8	7	8	5	10	0	10	6	15	11	7	3	0	0	6	1	0	0	2	1	1	0
November	12.0	S.	29	NW.	0	2	3	3	3	15	6	9	19	0	10	11	9	8	7	5	3	0	1	1	6	0	16	1	0	0
December	11.4	W.	29	W.	0	2	2	5	6	15	7	14	11	0	5	6	20	9	7	6	0	0	13	9	12	0	28	0	0	0
Year	11.2	S.	38	NW.	8	88	59	71	103	129	92	79	109	0	106	111	148	117	91	47	18	3	51	27	43	44	115	38	1	0

SPRINGFIELD, MO.

[H=1,300 ft.; H_t=1,324 ft.; h_r=98 ft.; h_r=66 ft.; h_s=104 ft.]

January	10.6	SE.	29	W.	0	14	8	8	14	7	3	4	4	0	7	8	16	15	11	8	2	0	18	8	10	0	27	2	0	0
February	12.1	SE.	34	NW.	1	6	5	3	8	8	5	12	9	0	8	11	9	6	6	10	3	0	2	0	6	0	22	2	0	0
March	10.7	N.	38	SW.	1	11	8	4	11	5	8	4	9	2	8	12	11	10	6	7	3	2	3	2	4	0	14	4	0	0
April	12.3	SE.	31	S.	0	6	2	6	12	11	2	7	12	2	7	13	10	12	11	1	0	2	8	1	0	0	2	6	0	0
May	8.9	S.	27	NE.	0	8	3	7	13	12	6	7	5	1	9	16	6	10	9	0	0	0	2	1	0	0	0	9	0	0
June	8.0	S.	43	NW.	1	9	2	5	12	15	6	8	2	1	13	9	8	10	9	0	0	0	4	0	0	5	0	10	0	0
July	8.5	S.	27	N.	0	3	5	9	12	21	5	3	3	1	13	15	3	11	7	0	0	1	1	0	0	8	0	11	0	0
August	8.0	SE.	26	E.	0	3	8	11	15	13	4	4	2	2	11	17	3	7	4	0	0	0	3	0	0	16	0	6	0	0
September	9.0	SE.	21	SE.	0	5	8	4	18	11	3	2	8	1	14	9	7	7	6	0	0	0	2	0	0	3	0	3	0	0
October	9.1	S.	31	W.	0	6	8	5	10	13	7	8	5	0	15	5	11	8	7	0	0	0	3	1	0	0	2	3	0	0
November	10.5	S.	27	W.	0	6	8	4	15	9	0	4	14	0	14	5	11	11	9	5	5	0	3	0	6	0	14	3	0	0
December	9.8	NW.	24	SW.	0	5	4	6	9	11	2	7	17	1	7	5	19	11	8	2	1	0	16	6	5	0	22	0	0	0
Year	9.8	S.	43	NW.	3	82	69	72	149	136	51	70	90	11	126	125	114	118	93	33	14	5	65	19	31	32	103	59	0	0

SYRACUSE, N. Y.

[H=400 ft.; H_b=596 ft.; h_t=65 ft.; h_r=57 ft.; h_s=79 ft.]

January	8.8	W.	26	S.	0	5	0	12	5	14	6	13	7	0	3	6	22	18	14	14	9	0	10	0	4	0	24	0	0
February	8.3	W.	24	NW.	0	3	0	9	9	8	7	15	5	0	4	4	20	15	10	17	12	0	9	0	12	0	24	0	0
March	8.7	W.	21	NW.	0	5	4	8	1	6	9	20	9	0	5	7	19	18	11	22	15	0	13	0	11	0	27	1	0
April	8.2	E.	22	SE.	0	1	1	18	7	9	3	12	9	0	3	11	16	16	14	7	4	0	8	0	0	0	6	1	2
May	6.9	NW.	21	SW.	0	2	0	8	6	10	8	10	18	0	9	11	11	14	10	0	0	0	8	0	0	0	0	1	0
June	6.3	NW.	19	NW.	0	5	1	7	5	12	8	9	13	0	6	12	12	12	10	0	0	0	6	0	0	0	0	5	0
July	6.6	S.	23	NW.	0	1	0	4	10	18	9	12	8	0	11	12	8	15	9	0	0	2	1	0	0	4	0	11	0
August	5.6	S.	18	W.	0	3	0	11	12	17	4	9	6	0	9	10	12	11	11	0	0	0	6	0	0	7	0	7	0
September	6.8	S.	21	SW.	0	4	0	7	11	18	6	10	4	0	12	9	9	9	6	0	0	0	3	0	0	2	0	2	0
October	8.0	S.	24	NW.	0	3	0	8	6	20	8	9	8	0	3	8	20	21	17	4	2	0	9	0	0	0	2	1	0
November	7.9	SW.	25	SW.	0	3	0	4	5	19	13	13	3	0	2	5	23	18	9	7	6	0	3	0	2	0	11	0	0
December	7.4	W.	23	SW.	0	3	3	7	3	19	13	10	4	0	4	7	20	16	12	23	11	0	4	0	12	0	26	0	0
Year	7.5	S.	26	S.	0	38	9	103	80	170	94	142	94	0	71	102	192	183	133	94	59	2	80	0	41	13	120	29	2

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

TACOMA, WASH. [φ = 47°16' N.; λ = 122°23' W.]																											
Month	Pressure			Temperature										Moisture													
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation			Cloudiness					
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall unmelted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
January	In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.				
February							35.2	25.6	30.4	44	13										2.16	0.60	12.7				
March							47.1	34.8	41.0	61	27										5.33	.76	6.8				
April							55.9	40.7	48.3	68	33										2.60	.50	T				
May							56.1	41.7	48.9	67	35										5.27	1.38	.0				
June							64.5	46.4	55.4	80	41										1.42	.46	.0				
July							70.2	52.8	61.5	85	47										3.40	.61	.0				
August							74.7	54.5	64.6	88	49										.14	.12	.0				
September							72.7	53.8	63.2	85	48										2.05	.80	.0				
October							68.5	51.7	60.1	84	41										.73	.36	.0				
November							63.5	47.5	55.5	80	40										1.85	.86	.0				
December							53.1	42.6	47.8	64	30										9.78	2.75	T				
Year							48.7	39.6	44.2	59	29										8.27	2.39	3.0				
TAMPA, FLA. [φ = 27°57' N.; λ = 82°27' W.]																											
January	30.10	30.28	29.94	65.1	77.3	72.5	80.5	64.4	72.4	85	56	64	64	64	96	65	77	0.597	0.604	0.610	1.72	1.15	0.0	3.8	6.2	4.7	5.8
February	30.02	30.28	29.79	56.5	67.8	63.8	71.5	53.4	62.4	82	41	51	52	54	82	59	72	.399	.414	.436	10.92	5.06	.0	4.6	5.8	5.0	5.2
March	29.99	30.35	29.72	57.6	70.1	66.2	73.6	55.8	64.7	85	40	53	53	54	84	56	67	.423	.424	.434	2.83	1.73	.0	3.9	4.7	4.9	5.0
April	29.98	30.35	29.73	64.9	76.2	71.3	79.2	61.8	70.5	88	50	58	57	60	80	54	68	.512	.502	.534	3.75	1.17	.0	5.0	4.0	5.3	4.7
May	29.94	30.10	29.81	71.3	82.8	78.3	86.1	68.4	77.2	94	64	66	63	65	84	53	65	.648	.588	.622	4.98	2.58	.0	2.5	4.4	4.5	4.1
June	29.97	30.15	29.68	76.7	86.1	81.1	89.3	73.4	81.4	93	67	72	68	70	84	56	70	.772	.686	.731	5.91	4.23	.0	4.0	5.5	6.3	5.4
July	30.02	30.16	29.77	78.2	85.4	82.2	89.0	74.9	82.0	95	70	74	70	73	86	63	74	.825	.748	.805	8.32	2.42	.0	4.5	6.4	6.9	6.6
August	30.00	30.15	29.79	77.3	87.2	79.4	90.2	73.5	81.8	94	70	74	72	72	89	60	79	.830	.773	.799	8.08	1.54	.0	3.8	6.0	7.0	6.3
September	29.93	30.09	29.68	75.6	85.2	79.8	88.0	73.1	80.6	94	69	71	69	71	87	59	74	.769	.706	.755	1.05	.42	.0	4.6	6.8	5.1	6.5
October	29.95	30.11	29.68	68.5	79.7	73.6	82.0	65.5	73.8	91	46	64	62	63	85	55	71	.632	.588	.611	2.88	1.72	.0	4.7	4.8	4.4	5.1
November	30.00	30.37	29.50	58.0	70.4	64.8	73.2	55.6	64.4	83	32	53	53	56	83	56	74	.429	.431	.469	3.44	1.47	.0	3.6	4.2	2.9	4.0
December	30.09	30.28	29.74	52.5	66.0	61.5	69.3	50.4	59.8	79	28	48	48	50	86	55	67	.363	.371	.388	1.12	.80	.0	3.8	3.4	2.7	3.7
Year	30.00	30.37	29.50	66.8	77.8	72.9	81.0	64.2	72.6	95	28	62	61	63	86	58	72	.600	.570	.600	55.00	5.06	.0	4.1	5.2	4.9	5.2
TATOOSH ISLAND, WASH. [φ = 48°23' N.; λ = 124°44' W.]																											
January	29.94	30.44	29.34	35.0	36.2	36.1	38.5	32.3	35.4	46	26	28	27	28	74	70	71	0.155	0.150	0.154	2.82	0.57	7.8	5.6	6.4	5.9	6.9
February	29.76	30.15	29.01	39.6	41.7	41.3	43.8	37.2	40.5	52	32	35	36	36	85	79	82	.208	.210	.213	10.00	2.11	3.3	9.1	8.1	8.6	8.6
March	29.83	30.28	29.35	45.0	47.2	47.7	49.9	42.5	46.2	62	38	40	40	41	83	79	78	.247	.255	.256	4.00	.83	.0	7.9	8.3	9.0	8.8
April	29.88	30.28	29.10	44.5	47.3	47.2	49.0	42.4	45.7	55	38	40	41	41	86	80	80	.252	.261	.259	10.79	1.76	.0	9.3	9.2	8.0	9.0
May	29.97	30.34	29.57	48.6	51.8	52.3	54.5	46.9	50.7	67	43	43	45	45	82	79	79	.281	.300	.305	3.73	1.57	.0	7.8	5.4	6.3	6.9
June	29.91	30.24	29.50	52.7	57.0	56.7	59.6	50.9	55.2	68	47	49	51	51	89	80	80	.352	.372	.371	5.40	1.35	.0	7.6	7.5	6.7	7.5
July	30.03	30.22	29.79	53.3	56.6	56.8	58.5	52.3	55.4	64	48	51	53	53	94	87	87	.379	.397	.401	.42	.23	.0	6.5	3.7	4.8	7.3
August	29.99	30.23	29.57	53.6	57.6	57.5	60.1	52.0	56.0	65	48	51	53	53	92	85	85	.376	.401	.403	4.05	1.27	.0	7.2	6.2	5.9	7.3
September	29.97	30.41	29.39	52.4	56.3	53.7	58.9	50.7	54.8	71	46	50	51	51	93	84	86	.363	.375	.376	2.34	1.73	.0	4.7	4.6	4.9	6.7
October	29.91	30.35	29.31	52.1	54.6	53.9	57.4	49.9	53.6	66	43	49	50	50	90	85	87	.350	.361	.362	9.54	2.77	.0	5.7	6.3	5.4	6.8
November	29.78	30.28	29.31	48.9	49.9	49.6	52.5	45.4	49.0	60	36	44	43	43	84	80	80	.289	.286	.284	13.65	2.56	T	8.6	7.8	7.6	8.0
December	29.87	30.57	28.85	45.9	46.6	46.4	49.0	42.5	45.8	56	31	40	40	40	81	78	78	.258	.251	.253	9.01	1.42	.2	8.3	7.4	8.0	8.1
Year	29.90	30.57	28.85	47.6	50.2	49.9	52.6	45.4	49.0	71	26	43	44	44	86	80	81	.292	.302	.303	75.75	2.77	11.3	7.4	6.7	6.8	7.7
TERRE HAUTE, IND. [φ = 39°29' N.; λ = 87°24' W.]																											
January	29.51	29.90	28.90	30.1	35.2	35.1	41.0	25.0	33.0	60	1	26	29	30	85	78	81	0.155	0.175	0.182	8.99	2.42	4.2	7.1	8.2	6.7	7.5
February	29.40	30.05	28.65	29.2	35.0	34.2	40.6	24.1	32.4	67	9	23	25	25	77	66	68	.136	.148	.141	1.94	.92	3.5	5.6	7.1	6.1	6.5
March	29.45	29.77	28.77	33.0	42.6	42.9	48.2	30.5	39.4	70	15	28	28	29	80	57	58	.157	.164	.162	1.78	.81	8.1	6.0	6.5	5.5	6.1
April	29.28	29.79	28.62	46.1	57.0	56.2	62.5	43.1	52.8	86	34	39	40	42	77	55	61	.250	.262	.286	5.57	1.43	T	6.7	7.4	7.2	6.9
May	29.36	29.61	29.12	58.9	71.7	69.4	76.2	54.6	65.4	94	42	51	50	50	76	49	54	.389	.380	.389	2.62	1.05	.0	4.8	5.9	6.3	5.3
June	29.33	29.68	29.08	67.9	79.7	77.0	83.8	63.3	73.6	99	52	60	60	60	76	53	59	.523	.529	.540	5.90	2.46	.0	6.0	6.6	5.7	5.8
July	29.37	29.56	29.15	70.1	84.0	83.0	88.6	66.3	77.4	97	53	62	61	62	77	48	51	.573	.561	.569	2.78	1.56	.0	3.4	4.7	3.6	3.5
August	29.41	29.63	29.18	71.0	87.0	83.4	90.5	68.5	79.5	97	60	65	65	67	83	50	59	.628	.628	.662	3.10	2.51	.0	3.1	3.5	3.7	3.1
September	29.45	29.73	29.02	57.9	75.2	71.1	79.1	55.8	67.4	97	40	52	49	52	80	52	52	.407	.389	.419	1.63	.56	.0	3.6	3.6	2.7	3.3
October	29.40	29.88	28.68	47.9	59.1	56.5	63.1	45.2	54.2	88	28	43	41	42	82	54	60	.303	.281	.289	6.22	3.11	T	5.8	6.0	5.1	5.6
November	29.49	30.08	28.92	34.2	44.4	42.5	49.3	31.7	40.5	76	13	29	30	30	80	56	61	.168	.168	.177	1.67	.73	1.2	6.2	6.4	5.3	5.8
December	29.52	29.97	29.00	27.9	33.4	33.6	37.0	25.1	31.0	57	9	25	25	26	87	72	75	.142	.150	.149	3.26	1.86	.9	7.5	7.1	6.3	7.3
Year	29.41	30.08	28.62	47.8	58.7	57.0	63.3	44.4	53.9	99	1	42	42	43	80	57	62	.319	.320	.330	45.46	3.11	17.9	5.5	6.1	5.4	5.6

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

TACOMA, WASH.

[H=107 ft.; H_b=194 ft.; h_t=172 ft.; h_r=165 ft.; h_a=201 ft.]

Month	Wind												Number of days																	
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from							Precipitation	Snow		Fog		Maximum temp.		32° or below	90° or above	Minimum temperature or below	Thunderstorm	Aurora						
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West													Northwest	Calm				
January	Mi.	N.	Mi.												10	1	20	14	11	13	7	0	2	0	10	0	28	0	0	
February		SW.													2	6	20	19	14	10	3	1	3	1	0	0	9	0	0	
March		SW.													2	6	23	18	15	1	0	0	6	0	0	0	0	0	0	0
April		SW.													0	4	26	15	14	0	0	2	0	0	0	0	0	0	0	1
May		N.													11	10	10	9	6	0	0	0	0	0	0	0	0	0	0	0
June		N.													12	2	16	13	11	0	0	0	0	0	0	0	0	0	0	0
July		N.													19	5	7	3	1	0	0	0	3	0	0	0	0	0	2	0
August		N.													12	7	12	7	5	0	1	4	0	0	0	0	0	1	2	0
September		N.													16	5	9	4	3	0	0	0	13	0	0	0	0	0	0	0
October		N.													11	13	7	13	11	0	0	9	9	0	0	0	0	0	0	0
November		SW.													2	4	24	24	21	1	0	0	5	1	0	0	2	0	0	0
December		SW.													2	5	24	19	16	5	3	1	5	3	0	0	6	0	0	0
Year		N.													99	68	198	158	128	30	13	5	50	14	10	0	45	6	3	0

TAMPA, FLA.

[H=23 ft.; H_b=35 ft.; h_t=88 ft.; h_r=81 ft.; h_a=197 ft.]

January	10.7	SE.	23	S.	0	4	10	20	9	6	5	5	3	0	5	21	5	6	5	0	0	0	12	8	0	0	0	0	2	0
February	12.3	S.	32	W.	1	9	6	9	6	9	5	4	2	0	12	8	8	8	7	0	0	0	3	1	0	0	0	0	0	0
March	11.0	N.	30	E.	0	13	8	10	7	3	2	6	13	0	10	10	8	6	5	0	0	0	3	2	0	0	0	0	2	0
April	11.0	S.	29	NW.	0	9	8	5	10	8	2	10	8	0	11	12	7	8	7	0	0	0	2	2	0	0	0	0	4	0
May	9.7	E.	30	SE.	0	12	6	20	6	3	1	1	13	0	16	9	6	5	4	0	0	0	1	0	0	3	0	6	0	0
June	9.4	W.	35	N.	1	1	3	12	13	5	4	14	8	0	7	16	7	11	8	0	0	0	0	0	0	11	0	18	0	0
July	9.1	W.	51	SE.	1	3	2	13	11	5	8	15	5	0	4	17	10	18	15	0	0	0	1	0	0	18	0	18	0	0
August	8.4	E.	35	SE.	4	5	9	14	13	9	1	2	8	1	2	19	10	21	17	0	0	0	0	0	0	22	0	26	0	0
September	10.1	NE.	32	E.	1	10	14	10	13	4	3	2	4	0	3	16	11	8	6	0	0	0	1	0	0	10	0	8	0	0
October	11.2	E.	30	N.	0	9	19	16	3	3	1	4	7	0	11	8	12	9	9	0	0	7	1	0	7	0	2	0	0	0
November	12.3	NE.	32	E.	1	18	16	13	1	4	1	1	6	0	16	7	7	8	8	0	0	0	3	0	0	0	1	1	0	0
December	11.8	NE	35	NW.	1	20	20	13	0	4	1	2	2	0	14	12	5	4	4	0	0	0	6	2	0	0	1	0	0	0
Year	10.6	E.	51	SE.	10	113	121	155	92	63	34	66	85	1	114	155	96	112	95	0	0	0	39	16	0	71	2	91	0	0

TATOOSH ISLAND, WASH.

[H=98 ft.; H_b=86 ft.; h_t=10 ft.; h_r=3 ft.; h_a=54 ft.]

January	16.9	E.	51	E.	15	1	6	33	5	10	2	1	4	0	7	5	19	18	16	12	5	0	0	0	1	0	0	0	0	0
February	16.3	E.	69	S.	11	0	3	18	2	12	7	11	2	1	1	5	22	21	17	6	4	0	0	0	0	0	1	0	0	0
March	15.5	E.	50	E.	12	1	3	23	6	12	7	8	2	0	1	5	25	22	19	0	0	0	0	1	0	0	0	0	0	0
April	16.2	S.	51	S.	13	0	1	8	7	21	8	12	2	0	1	0	3	27	27	23	0	0	0	0	0	0	0	1	0	0
May	13.8	W.	43	E.	5	1	2	12	2	10	11	19	5	0	5	10	16	10	9	0	0	0	3	1	0	0	0	0	0	0
June	9.9	SW.	35	S.	5	1	5	7	2	15	19	7	4	0	4	5	21	10	10	0	0	0	6	4	0	0	0	0	0	0
July	9.1	SW.	28	S.	0	0	0	3	0	21	29	8	1	0	5	9	17	6	4	0	0	0	11	15	0	0	0	0	0	0
August	8.9	S.	32	S.	1	0	2	10	1	28	14	6	1	0	4	7	20	16	13	0	0	0	6	12	0	0	0	0	0	0
September	10.3	S.	42	S.	5	1	6	12	4	16	9	10	1	1	7	6	17	9	6	0	0	0	7	12	0	0	0	2	0	0
October	14.9	E.	55	S.	11	0	3	32	3	14	5	3	0	2	6	8	17	14	14	0	0	0	2	8	0	0	0	1	1	0
November	20.1	E.	49	E.	23	0	1	25	6	11	7	10	0	0	3	6	21	26	26	2	1	2	0	0	0	0	0	2	0	0
December	19.2	E.	57	SW.	17	0	2	26	3	9	11	9	2	0	2	6	23	25	22	5	4	0	5	0	0	0	1	1	0	0
Year	14.3	E.	69	S.	118	5	34	209	41	179	129	104	24	5	45	75	245	204	179	25	14	2	40	53	1	0	16	7	1	0

TERRE HAUTE, IND.

[H=503 ft.; H_b=575 ft.; h_t=63 ft.; h_r=61 ft.; h_a=149 ft.]

January	10.4	SW.	30	SW.	0	6	10	5	12	5	12	4	8	0	5	5	21	15	14	4	2	0	12	3	10	0	25	1	0	0
February	12.3	NW.	38	SW.	1	7	1	1	8	8	12	6	13	0	5	10	13	11	9	13	6	0	2	0	5	0	24	1	0	0
March	10.1	N.	26	NW.	0	14	8	5	3	4	9	7	12	0	7	14	10	11	6	9	3	0	3	0	3	0	17	2	0	0
April	11.0	SE.	33	SW.	1	11	4	5	14	10	6	6	6	0	7	5	18	14	12	1	0	1	2	2	0	0	0	6	0	0
May	8.8	SE.	29	W.	0	10	7	4	14	8	10	5	3	1	12	6	13	12	10	0	0	0	0	0	0	0	0	0	0	0
June	8.6	N.	31	SW.	0	11	11	4	4	11	6	3	10	0	6	16	8	14	12	0	0	1	0	0	0	0	0	12	0	0
July	7.2	SW.	36	W.	1	4	10	2	7	7	22	5	5	0	18	11	2	6	5	0	0	0	0	0	0	15	0	9	0	0
August	7.0	SW.	32	NW.	1	10	9	12	9	9	9	3	1	0	21	5	5	8	8	0	0	1	2	1	0	20	0	8	0	0
September	8.8	NE.	25	NW.	0	9	16	4	11	16	0	2	2	0	17	8	5	6	4	0	0	0	0	0	0	5	0	2	0	0
October	9.5	SW.	34	SW.	1	9	7	4	9	5	10	6	12	0	11	9	11	12	9	2	0	0	3	0	0	0	4	1	0	0
November	9.8	NW.	27	SW.	0	2	4	1	6	12	9	14	12	0	8	10	12	8	6	7	3	0	2	0	3	0	14	3	0	0
December	9.4	SW.	24	W.	0	7	3	8	4	6	17	8	9	0	7	4	20	14	11	6	3	0	10	0	11	0	24	0	0	0
Year	9.4	SW.	38	SW.	5	100	90	53	101	101	122	69	93	1	124	103	138	131	106	42	17	3	36	6	32	50	108	55	0	0

TABLE 15.—*Annual meteorological summaries for the year ended Dec. 31, 1937*—Continued

TOLEDO, OHIO

[$\phi=41^{\circ}40'$ N.; $\lambda=83^{\circ}34'$ W.]

Month	Pressure			Temperature							Moisture																		
	Extremes			Mean					Extremes		Dew point			Relative humidity			Vapor pressure			Precipitation			Cloudiness						
	Monthly mean	Maximum	Minimum	7 30 a. m.	Noon, local time	7 30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7 30 a. m.	Noon, local time	7 30 p. m.	7 30 a. m.	Noon, local time	7 30 p. m.	7 30 a. m.	Noon, local time	7 30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7 30 a. m.	Noon, local time	7 30 p. m.	Daylight		
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°
January	29.48	30.01	28.80	28.8	32.0	32.9	38.9	23.6	31.2	60	7	25	26	27	84	78	79	0.142	0.150	0.163	5.36	1.49	4.8	6.8	6.9	6.6	7.0		
February	29.30	29.93	28.51	26.2	31.8	30.1	35.6	22.0	28.8	65	11	21	23	23	78	68	72	.118	.135	.130	1.59	.79	2.0	7.8	7.1	5.8	6.8		
March	29.37	29.74	28.86	27.8	34.2	34.4	38.6	25.5	32.0	56	12	22	23	23	78	63	64	.122	.125	.127	1.22	.66	4.5	6.4	6.4	6.2	5.8		
April	29.26	29.74	28.67	41.3	49.7	50.3	54.3	38.5	46.4	76	30	35	36	38	79	62	65	.210	.226	.246	4.77	1.52	T	5.5	7.2	7.4	6.5		
May	29.33	29.60	29.05	54.5	65.3	63.9	69.5	50.4	60.0	92	37	46	47	48	75	54	58	.325	.340	.346	2.23	.53	.0	5.4	6.0	5.3	5.1		
June	29.28	29.64	28.97	64.8	72.9	71.6	76.8	60.6	68.7	87	50	57	57	58	78	59	64	.485	.484	.494	6.67	2.66	.0	6.1	6.2	6.0	5.6		
July	29.32	29.51	29.01	69.0	79.1	77.2	82.9	65.1	74.0	95	51	61	60	60	76	54	58	.554	.538	.546	4.55	1.87	.0	4.2	4.2	4.2	4.2		
August	29.40	29.63	29.15	68.7	80.6	77.4	83.5	66.0	74.8	93	55	64	64	65	84	58	67	.592	.592	.620	2.78	1.36	.0	4.8	4.4	4.4	4.3		
September	29.42	29.77	28.93	56.4	68.5	66.3	72.2	53.4	62.8	90	40	49	48	50	78	50	58	.381	.363	.386	2.23	1.30	.0	3.8	4.2	3.9	3.8		
October	29.35	29.90	28.63	45.7	54.1	51.9	57.7	42.5	50.1	86	30	40	39	40	82	59	64	.275	.266	.267	2.34	1.61	T	6.2	6.4	5.4	6.4		
November	29.39	29.97	28.62	35.1	41.7	39.9	46.1	31.7	38.9	66	16	29	30	29	78	64	66	.170	.175	.169	.73	.29	.9	6.7	6.1	6.6	6.4		
December	29.44	29.95	28.94	25.6	29.5	29.3	32.5	23.0	27.8	50	7	22	24	24	83	78	79	.118	.132	.135	1.52	.56	1.2	7.4	7.3	6.5	7.3		
Year	29.36	30.01	28.51	45.3	53.3	52.1	57.4	41.9	49.6	95	7	39	40	40	79	62	66	.291	.294	.302	35.99	2.66	13.4	5.9	6.0	5.7	5.8		

TOPEKA, KANS.

[$\phi=39^{\circ}03' \text{ N.}; \lambda=95^{\circ}41' \text{ W.}$]

January	29.04	29.50	28.43	18.9		23.0	30.8	13.5	22.2	54	0	14		16	78		75	0.091		0.098	1.82	1.19	T	6.1			6.3	5.6
February	28.97	29.64	28.06	26.1		33.0	39.1	21.7	30.4	60	4	19		24	74		67	.108	.131	.61	.47	5.3	5.6			6.3	5.6	
March	29.02	29.36	28.12	32.7		43.7	48.9	30.0	39.4	73	15	27		32	80		64	.151	.191	2.05	1.40	5.1	5.7			5.5	5.8	
April	28.81	29.25	28.22	47.5		59.9	65.1	43.7	5.4	85	30	40		40	76		52	.262	.267	1.76	.65	2.0	7.1			7.2	6.4	
May	28.90	29.18	28.58	58.9		73.9	79.0	56.6	67.8	92	41	54		56	83		56	.428	.473	3.12	.78	.0	5.7			5.8	5.4	
June	28.87	29.19	28.51	68.0		83.0	87.3	65.0	76.2	105	51	61		62	79		52	.555	.571	1.14	.79	.0	5.2			4.5	5.1	
July	28.89	29.11	28.54	72.8		89.7	95.5	69.7	82.6	105	61	65		63	76		44	.614	.586	1.65	1.18	.0	4.6			4.2	4.0	
August	28.92	29.12	28.68	75.0		89.6	96.4	72.2	8.3	106	63	67		66	76		47	.660	.634	3.35	.232	.0	4.0			4.7	4.0	
September	28.98	29.34	28.70	61.8		78.1	83.9	60.1	72.0	102	40	53		52	73		43	.432	.425	.43	1.4	.0	3.5			3.5	4.2	
October	28.97	29.52	28.47	48.6		62.1	68.9	45.7	57.3	90	25	40		40	73		48	.264	.269	1.40	.43	T	4.4			4.1	4.0	
November	29.06	29.58	28.47	34.3		43.4	49.7	30.5	40.1	81	7	26		29	71		58	.148	.167	1.34	.61	6.3	4.3			4.8	4.6	
December	29.08	29.41	28.67	28.2		32.7	37.9	23.5	30.7	57	3	24		25	83		74	.140	.149	.76	.71	.5	5.2			4.4	6.2	
Year	28.96	29.35	28.45	47.7		59.3	65.2	44.4	54.8	106	0	41		42	77		57	.321	.330	19.43	2.32	19.2	5.1			5.1	5.1	

TRENTON, N. J.

[$\phi=40^{\circ}13'$ N.; $\lambda=74^{\circ}46'$ W.]

January	30.06	30.61	29.40	37.4	41.4	41.2	46.2	33.2	30.7	67	23	34	37	37	86	84	84	0.206	0.230	0.228	5.43	0.87	1.7	7.6	8.2	7.2	7.7
February	29.79	30.19	29.17	30.5	37.6	37.0	42.0	27.0	34.5	58	16	24	26	26	74	62	64	.132	.145	.148	1.52	.63	2.9	4.6	6.1	4.0	6.0
March	29.73	30.25	29.30	32.9	40.1	39.2	43.5	30.0	36.8	62	20	22	24	25	64	55	59	.122	.134	.139	1.97	.55	4.2	5.4	5.3	4.5	5.4
April	29.79	30.29	29.30	45.6	54.2	51.2	58.4	41.6	50.0	79	32	36	37	37	72	56	62	.223	.232	.235	4.31	1.81	T	6.5	6.2	6.5	6.2
May	29.76	30.24	29.43	59.1	71.0	66.7	75.3	52.5	63.9	92	42	48	48	48	69	45	54	.355	.338	.359	2.86	1.75	.0	4.5	4.3	4.6	4.3
June	29.71	30.08	29.25	67.6	77.2	73.6	80.6	61.7	71.2	90	54	60	59	60	77	55	65	.619	.507	.525	4.05	1.22	.0	6.0	6.1	7.0	6.2
July	29.77	29.98	29.48	71.3	81.4	77.1	85.4	66.2	75.8	99	56	63	61	63	76	52	61	.692	.555	.590	1.54	1.70	.0	5.5	5.2	5.5	5.4
August	29.86	30.10	29.58	71.1	82.0	77.0	85.0	67.1	76.0	95	58	67	65	66	87	59	72	.666	.629	.656	1.52	1.76	.0	5.8	5.9	6.6	5.7
September	29.86	30.36	29.39	59.0	69.8	65.8	73.8	54.8	64.3	92	43	52	52	53	80	55	65	.414	.403	.424	1.90	1.15	.0	3.5	5.0	3.0	4.5
October	29.84	30.44	29.10	49.3	59.4	54.7	62.7	45.0	53.8	76	32	43	42	42	80	54	65	.306	.291	.299	4.35	1.24	.0	5.9	6.3	4.3	6.4
November	29.87	30.42	29.21	39.7	49.3	45.4	52.4	36.9	44.6	68	26	32	32	33	74	53	60	.196	.194	.200	3.54	1.79	T	5.9	5.4	3.8	5.2
December	29.93	30.40	29.19	31.2	37.0	36.0	40.1	28.2	34.2	65	16	23	22	23	70	54	60	.131	.127	.129	1.14	.37	T	5.9	5.8	5.2	6.3
Year	29.83	30.61	29.10	49.6	58.4	55.5	62.1	45.4	53.7	99	16	42	42	43	76	57	64	.322	.315	.328	38.03	1.79	8.8	5.6	5.8	5.1	5.8

VALENTINE, NEBR.

[$\phi=42^{\circ}50'$ N.; $\lambda=100^{\circ}32'$ W.]

January	27.28	27.73	26.55	0.2	11.3	9.1	17.3	-5.7	5.8	39	-17	-3	4	4	87	72	79	0.037	0.053	0.051	0.41	0.18	8.2	3.7	5.9	5.5	5.7
February	27.23	27.75	26.56	15.1	29.4	27.8	34.6	10.4	22.5	60	-10	10	13	15	79	52	59	0.069	0.080	0.088	0.04	0.01	4	3.5	6.1	5.2	5.5
March	27.35	27.68	26.53	24.5	37.7	39.1	43.4	21.6	32.5	76	6	20	22	23	84	57	55	0.111	0.121	0.122	0.64	0.40	3.7	6.0	6.6	7.1	6.7
April	27.19	27.69	26.72	35.6	51.4	53.0	56.6	34.0	45.3	79	22	29	29	29	77	46	44	0.160	0.158	0.161	1.22	0.44	2.8	6.0	6.6	6.9	6.5
May	27.25	27.62	26.89	52.1	66.5	67.6	72.1	48.9	60.5	94	38	44	42	42	75	45	44	0.299	0.281	0.278	1.72	0.53	0	5.1	6.2	6.6	5.8
June	27.27	27.54	26.85	57.7	72.6	73.6	77.4	55.3	66.4	107	39	50	48	48	78	47	47	0.377	0.351	0.351	1.40	0.37	0	5.4	5.8	5.4	5.5
July	27.29	27.55	27.06	65.8	86.6	86.8	91.7	64.1	77.9	104	56	56	54	53	73	35	34	0.460	0.428	0.410	1.08	0.44	0	3.3	3.0	3.4	3.3
August	27.28	27.51	27.06	66.9	87.4	87.6	92.6	64.4	78.6	108	55	56	53	53	71	36	37	0.465	0.424	0.423	2.46	0.92	0	3.4	3.5	4.5	3.6
September	27.34	27.73	27.05	65.1	73.8	73.7	78.6	52.0	65.3	98	32	45	45	44	72	39	37	0.324	0.322	0.310	0.93	0.53	0	4.2	4.1	4.1	3.8
October	27.33	27.75	26.88	40.1	57.7	56.3	62.4	43.7	49.8	86	24	32	34	33	72	44	45	0.182	0.197	0.193	0.76	0.51	0	5.0	2.9	4.2	4.2
November	27.34	27.80	26.68	40.7	48.8	46.9	44.0	23.7	33.8	71	-6	21	23	22	77	53	60	0.116	0.123	0.121	1.17	0.14	1.8	5.3	6.3	6.0	5.7
December	27.33	27.77	26.86	20.4	32.2	28.3	37.1	14.3	25.7	56	-11	15	18	19	77	56	66	0.090	0.106	0.108	0.30	0.13	3.4	5.2	5.3	5.6	5.3
Year	27.29	27.80	26.53	38.4	54.0	53.3	59.0	35.0	47.0	108	-17	31	32	32	77	48	51	0.224	0.220	0.218	11.13	0.92	20.3	4.7	5.2	5.4	5.1

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

TOLEDO, OHIO

[H=589 ft.; H_b=628 ft.; h_i=79 ft.; h_r=72 ft.; h_a=87 ft.]

Month	Wind													Number of days																
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temp.		32° temperature or below	Elec- tricity				
	Average hourly ve- locity	Preval- ling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm				0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum	Thunderstorm	Aurora	
	Mi.		Mi.																											
January	10.8	W.	31	W.	0	6	1	15	1	5	10	18	6	0	7	5	19	16	15	7	4	0	12	5	8	0	27	0	0	
February	11.7	W.	32	W.	1	2	3	4	5	8	11	15	8	0	4	10	14	10	5	14	5	0	5	1	12	0	24	2	0	
March	10.7	N.W.	27	E.	0	6	6	7	1	1	7	14	20	0	8	12	11	8	6	11	4	0	8	1	6	0	28	1	0	
April	11.0	E.	32	W.	1	6	4	15	3	5	10	13	4	0	7	10	13	13	11	1	0	0	3	0	0	5	3	0	0	
May	8.4	W.	30	N.W.	0	8	5	9	7	4	5	14	10	0	9	15	7	13	9	0	0	1	0	1	0	1	0	7	0	
June	8.6	W.	24	N.W.	0	10	6	7	4	9	6	9	9	0	6	16	8	15	11	0	0	1	0	0	0	0	10	0	0	
July	8.1	W.	29	W.	0	5	3	9	6	1	14	13	11	0	14	14	3	11	10	0	0	1	0	0	6	0	10	0	0	
August	7.0	E.	25	SW.	0	15	6	12	4	4	9	7	5	0	15	8	8	7	0	0	0	6	0	0	4	0	7	2	0	
September	8.3	SW.	24	W.	0	11	3	7	7	8	7	8	9	0	15	9	6	3	3	0	0	1	0	0	1	0	0	0	0	
October	9.7	W.	30	W.	0	6	4	5	6	2	16	9	14	0	6	13	12	5	4	2	0	0	3	1	0	0	4	1	3	
November	11.1	W.	32	W.	1	0	2	5	2	6	13	25	7	0	9	5	16	14	5	7	5	0	5	1	5	0	14	1	0	
December	9.7	W.	28	W.	0	3	3	8	5	2	14	24	3	0	6	5	20	12	7	10	6	0	8	1	12	0	30	0	0	
Year	9.6	W.	32	W.	3	78	46	103	51	55	122	169	106	0	106	122	137	128	93	52	24	2	59	11	43	12	132	42	5	

TOPEKA, KANS.

[H=926 ft.; H_b=987 ft.; h_i=65 ft.; h_r=61 ft.; h_a=87 ft.]

January	10.0	NW.	27	W.	0	11	5	7	8	8	5	3	15	0	9	11	11	7	6	16	0	0	8	0	14	0	30	2	0
February	10.6	NW.	32	NW.	1	13	2	1	5	9	9	5	12	0	11	5	12	5	3	11	3	0	5	0	7	0	23	0	0
March	9.7	N.	30	NW.	0	15	4	5	12	6	8	5	7	0	10	9	12	7	5	9	4	0	10	0	4	0	19	2	0
April	11.5	NW.	30	NW.	0	12	2	1	11	7	8	6	13	0	4	13	13	7	4	2	1	1	12	1	0	0	2	3	0
May	8.9	S.	28	N.	0	9	3	3	12	15	7	4	8	1	10	11	10	14	8	0	0	1	7	0	0	3	0	9	0
June	8.8	S.	24	SW.	0	7	9	3	11	11	10	6	3	0	10	13	7	5	4	0	0	0	5	0	0	14	0	5	0
July	8.5	S.	33	N.	1	2	6	6	8	26	8	3	3	0	11	18	2	9	7	0	0	1	0	0	0	23	0	9	0
August	8.6	S.	27	NW.	0	5	7	4	14	23	8	1	0	0	12	15	4	9	5	0	0	1	3	0	0	25	0	10	0
September	8.7	S.	26	SW.	0	5	8	8	7	18	7	5	2	0	12	14	4	6	4	0	0	0	3	1	0	6	0	3	0
October	8.7	W.	28	NW.	0	10	4	7	9	11	5	13	3	0	16	10	5	7	6	1	0	0	8	0	0	1	3	1	2
November	9.5	S.	27	S.	0	9	3	4	6	13	5	9	11	0	11	11	8	5	4	7	4	0	4	0	6	0	14	2	0
December	8.9	NW.	23	NW.	0	3	5	4	3	12	7	9	19	0	7	11	13	4	1	3	1	0	18	6	9	0	28	0	0
Year	9.3	S.	33	N.	2	101	58	53	106	159	87	69	96	1	123	141	101	85	57	49	13	4	83	8	40	72	119	46	2

TRENTON, N. J.

[H=57 ft.; H_b=190 ft.; h_i=88 ft.; h_r=83 ft.; h_a=106 ft.]

January	9.7	N.	31	S.	0	18	10	1	3	8	7	6	9	0	3	8	20	15	14	4	2	0	22	4	0	0	14	0	0
February	11.0	NW.	34	SE.	2	9	4	2	3	7	6	4	21	0	7	11	10	10	9	8	3	0	11	3	0	0	22	0	0
March	11.4	NW.	28	NW.	0	13	8	1	2	5	7	11	15	0	12	9	10	11	9	9	2	0	14	0	3	0	20	1	0
April	11.9	N.	30	NE.	0	11	10	3	7	7	7	3	12	0	8	8	14	15	12	2	0	0	9	0	0	0	0	2	0
May	9.2	S.	27	N.	0	11	4	2	3	14	10	10	8	0	15	9	7	12	4	0	0	0	10	0	0	0	0	6	1
June	8.5	N.	25	S.	0	12	7	5	8	8	6	6	8	0	7	11	12	12	10	0	0	0	13	0	0	2	0	7	0
July	7.7	S.	26	S.	0	11	6	1	9	7	9	12	7	0	10	12	9	9	7	0	0	0	12	0	0	6	0	7	0
August	7.9	S.	31	S.	0	16	5	4	1	21	7	4	4	0	11	7	13	13	10	0	0	0	19	1	0	8	0	10	0
September	7.4	S.	30	N.	0	11	3	4	2	15	4	9	11	1	14	8	8	6	5	0	0	0	17	3	0	3	0	1	0
October	9.2	S.	30	N.	0	7	7	3	8	11	7	7	12	0	7	10	14	11	8	0	0	0	17	2	0	0	1	1	0
November	8.9	W.	27	E.	0	4	3	1	3	13	9	15	12	0	13	7	10	9	4	2	0	0	8	1	0	0	9	0	0
December	8.4	NW.	23	W.	0	9	4	3	2	6	8	13	17	0	9	5	17	7	5	6	0	0	9	0	5	0	20	0	0
Year	9.2	NW.	34	SE.	2	132	71	30	51	122	87	100	136	1	116	105	144	130	97	31	7	0	161	14	8	19	86	35	1

VALENTINE, NEBR.

[H=2,581 ft.; H_b=2,598 ft.; h_i=47 ft.; h_r=36 ft.; h_a=54 ft.]

January	9.4	W.	24	NW.	0	9	3	2	6	2	8	21	11	0	11	7	13	9	5	21	9	0	0	0	26	0	31	0	0
February	10.2	NW.	35	NW.	2	5	0	3	4	3	8	16	16	1	9	10	9	4	0	10	4	0	1	0	12	0	28	0	0
March	9.3	W.	28	E.	0	10	9	10	3	4	3	14	6	3	6	9	16	6	3	11	3	0	3	1	7	0	30	0	1
April	11.4	NW.	32	NW.	1	11	2	8	5	6	1	9	17	1	5	11	14	7	5	3	2	0	5	2	0	0	12	2	1
May	10.8	S.	32	NW.	1	12	9	5	7	12	1	9	6	1	10	9	12	11	7	0	0	1	0	0	0	1	0	5	1
June	9.5	E.	32	NW.	1	9	6	9	9	5	5	9	8	0	8	12	10	9	6	0	0	0	4	1	0	5	0	5	0
July	9.1	S.	27	SE.	0	8	1	11	6	8	7	13	6	2	13	17	1	8	6	0	0	2	0	0	0	20	0	8	0
August	9.8	S.	43	SW.	1	13	4	8	5	17	4	7	4	0	17	10	4	9	8	0	0	1	3	0	0	23	0	10	1
September	9.3	S.	25	SW.	0	6	3	6	5	13	3	11	9	4	16	9	5	4	4	0	0	0	3	1	0	4	1	3	1
October	9.2	W.	31	S.	0	7	6	4	7	7	2	13	13	3	13	11	7	4	2	4	0	0	3	0	0	0	7	0	2
November	9.8	W.	34	NW.	1	9	1	4	3	5	9	15	12	2	10	7	13	4	1	10	4	0	0	0	8	0	22	0	1
December	9.5	W.	28	NW.	0	2	2	5	3	7	5	23	15	0	10	11	10	6	5	10	6	0	1	1	9	0	31	0	0
Year	9.8	W.	43	SW.	7	101	46	75	63	89	56	160	123	17	128	123	114	81	52	69	28	4	23	6	62	53	162	33	8

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

VICKSBURG, MISS.

[$\phi=32^{\circ}22' N.$; $\lambda=90^{\circ}53' W.$]

Month	Pressure			Temperature									Moisture														
	Monthly mean	Extremes		Mean						Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation		Cloudiness						
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	8.5	8.7	7.9	9.0		
January	29.83	30.14	29.46	51.5	57.3	56.1	62.9	46.5	54.7	79	30	48	48	48	89	74	77	0.370	0.366	0.364	11.19	1.87	0.0	8.5	8.7	7.9	9.0
February	29.84	30.30	29.37	44.6	52.0	52.9	56.9	41.8	49.4	80	30	36	36	36	71	56	56	.229	.241	.244	4.74	1.48	.0	6.4	5.9	5.6	6.1
March	29.83	30.17	29.37	46.5	56.3	57.3	61.9	45.1	53.5	80	29	39	37	39	75	51	52	.255	.242	.254	5.37	2.11	.0	6.2	5.3	5.7	5.9
April	29.70	30.12	29.25	58.2	70.1	71.2	76.1	56.0	66.0	87	43	52	51	51	81	53	51	.415	.405	.405	3.48	2.10	.0	5.3	4.8	5.2	5.2
May	29.73	29.89	29.57	67.3	80.0	79.9	84.0	65.8	74.9	93	54	62	60	61	82	52	54	.558	.532	.546	1.87	.62	.0	4.1	5.0	4.0	4.5
June	29.72	29.96	29.46	74.2	85.4	84.0	89.6	71.6	80.6	96	67	69	68	68	85	57	61	.718	.687	.696	1.10	.64	.0	6.2	5.9	5.8	5.5
July	29.76	29.93	29.65	74.4	85.8	84.4	89.3	72.8	81.0	95	65	69	69	70	85	58	63	.721	.692	.736	1.57	1.32	.0	4.6	5.8	5.7	5.9
August	29.74	29.97	29.58	74.5	87.4	83.4	90.9	73.6	82.2	96	71	72	71	72	91	60	70	.771	.768	.790	3.65	1.68	.0	5.3	6.2	7.0	6.3
September	29.75	30.05	29.57	68.0	82.3	78.9	85.5	66.7	76.1	92	48	62	62	63	83	52	61	.590	.589	.607	1.27	.80	.0	5.0	4.7	4.8	4.5
October	29.75	30.07	29.39	57.4	69.4	67.1	73.0	54.9	64.0	88	34	53	52	54	84	58	64	.438	.435	.446	3.75	1.06	.0	4.8	4.9	3.4	4.7
November	29.86	30.34	29.40	47.3	58.4	56.2	62.3	45.2	53.8	83	24	40	39	40	76	52	57	.275	.276	.278	3.78	1.19	.0	6.2	5.4	4.6	5.4
December	29.90	30.25	29.33	45.4	52.5	52.1	56.6	43.4	50.0	73	19	39	40	41	79	66	68	.274	.292	.298	4.16	1.95	.0	7.1	7.6	6.5	7.5
Year	29.78	30.34	29.25	59.1	69.7	68.6	74.1	57.0	65.5	96	19	53	53	54	82	57	61	.468	.460	.472	45.93	2.11	.0	5.8	5.8	5.5	5.9

WALLA WALLA, WASH.

[$\phi=46^{\circ}02' N.$; $\lambda=118^{\circ}20' W.$]

January	29.04	29.52	28.44	15.5	17.2	17.2	22.7	8.9	15.8	49	-8	10	10	10	76	71	73	0.070	0.073	0.072	1.75	0.35	30.0	7.7	7.3	6.9	7.5
February	28.89	29.31	28.37	31.6	37.6	37.2	42.4	26.9	34.6	54	0	25	27	27	76	67	68	.140	.150	.153	.97	.31	7.6	7.4	8.2	7.6	8.3
March	28.90	29.33	28.43	41.7	50.4	54.4	56.2	38.8	47.5	65	31	34	36	36	76	59	52	.201	.211	.217	1.97	.59	.0	6.4	7.0	6.7	6.9
April	28.92	29.23	28.48	44.7	54.8	57.1	60.2	42.2	51.2	77	36	35	34	35	69	47	46	.204	.195	.207	3.09	.70	T	7.8	7.9	7.0	6.9
May	28.91	29.28	28.40	50.8	66.5	71.4	73.3	48.7	61.0	90	40	37	36	36	60	33	29	.224	.213	.212	4.47	.41	.0	4.5	3.0	4.0	3.9
June	28.89	29.19	28.55	58.4	74.3	76.9	79.3	55.9	67.6	101	49	46	44	44	66	39	36	.326	.306	.304	1.91	.53	.0	4.6	5.4	5.5	5.1
July	28.89	29.15	28.61	65.8	82.9	89.3	90.3	64.9	77.6	103	56	48	46	43	54	28	21	.341	.316	.282	1.15	.14	.0	2.1	1.3	1.1	1.7
August	28.93	29.19	28.61	61.5	77.2	82.4	83.9	59.6	71.8	99	47	42	44	40	50	32	25	.278	.296	.262	1.15	.08	.0	3.0	2.1	2.4	2.5
September	28.92	29.44	28.52	57.8	73.1	78.5	79.9	55.4	67.6	94	43	42	44	42	57	36	30	.274	.292	.280	1.20	.19	.0	2.3	2.9	3.5	3.1
October	28.98	29.37	28.67	52.1	62.3	65.1	67.9	48.5	58.2	77	42	43	44	44	73	54	49	.278	.293	.294	7.74	.24	.0	5.0	5.4	4.7	5.3
November	28.95	29.35	28.49	43.4	49.1	48.1	52.0	40.1	46.0	68	30	37	38	39	79	69	73	.220	.232	.243	2.89	.55	.0	6.1	7.9	8.4	8.9
December	29.02	29.60	28.35	37.9	39.9	40.1	43.4	34.0	38.7	61	24	31	32	32	80	76	76	.177	.181	.185	2.07	.69	2.1	7.4	8.3	7.9	8.7
Year	28.94	29.60	28.35	46.8	57.1	59.8	62.6	43.7	53.1	103	-8	36	36	36	68	51	48	.228	.230	.226	16.36	.70	39.7	5.4	5.6	5.5	5.7

WASHINGTON, D. C.

[$\phi=38^{\circ}54' N.$; $\lambda=77^{\circ}03' W.$]

January	30.13	30.68	29.54	41.3	44.5	45.0	50.3	37.4	43.8	76	29	35	36	36	79	75	73	0.218	0.234	0.229	7.83	1.77	T	7.8	8.9	7.5	8.5
February	29.90	30.35	29.29	32.7	38.6	38.8	44.6	28.5	36.6	64	20	24	23	24	70	54	56	.140	.134	.140	3.33	1.07	7.7	6.2	6.0	5.0	6.0
March	29.85	30.34	29.30	36.2	45.2	45.6	50.9	33.3	42.1	70	19	27	25	27	68	47	50	.147	.142	.154	1.50	.75	11.0	5.3	5.0	4.2	5.1
April	29.86	30.35	29.38	47.9	57.7	56.4	62.4	44.3	53.4	93	34	38	36	37	69	43	53	.237	.221	.232	6.85	2.93	T	5.6	6.2	5.9	6.0
May	29.86	30.32	29.56	59.9	71.2	69.0	76.6	55.1	65.8	91	40	51	48	51	73	46	54	.385	.363	.392	4.02	1.13	.0	4.2	4.4	4.5	4.4
June	29.79	30.10	29.42	70.4	80.6	76.6	84.6	65.6	75.1	92	56	64	62	64	79	55	67	.592	.570	.605	5.23	1.48	.0	5.4	5.7	5.9	5.8
July	29.86	30.07	29.63	72.2	82.0	79.7	86.3	68.1	77.2	96	58	65	64	66	79	56	65	.633	.605	.653	3.67	.80	.0	5.0	6.2	5.3	5.4
August	29.94	30.19	29.67	72.2	82.4	78.9	86.3	69.4	77.8	97	62	68	67	68	86	62	72	.678	.667	.701	6.70	1.96	.0	4.6	5.6	5.7	5.3
September	29.96	30.41	29.51	59.4	71.5	67.5	75.4	56.4	65.9	94	45	55	54	57	85	55	69	.448	.433	.479	1.76	1.24	.0	3.3	4.5	3.2	3.9
October	29.93	30.51	29.25	49.7	59.5	56.7	63.9	46.7	55.3	82	31	44	43	46	82	57	69	.310	.301	.334	8.81	2.93	.0	6.1	6.7	3.9	6.2
November	29.98	30.56	29.34	40.5	51.0	48.8	55.2	38.0	46.6	75	23	32	30	33	73	46	56	.196	.185	.205	3.88	2.95	T	5.1	4.2	3.8	4.6
December	30.03	30.51	29.42	32.4	40.5	39.1	44.1	29.9	37.0	72	17	24	23	25	70	49	56	.138	.131	.141	0.71	.30	T	6.6	5.4	5.5	5.8
Year	29.92	30.68	29.25	51.2	60.4	58.5	65.0	47.7	56.4	97	17	44	43	44	76	54	62	.344	.332	.355	54.29	2.95	18.7	5.4	5.7	5.0	5.6

WICHITA, KANS.

[$\phi=37^{\circ}41' N.$; $\lambda=97^{\circ}20' W.$]

January	28.62	29.07	28.13	21.4	24.4	25.3	32.5	16.1	24.3	54	0	17	17	19	82	74	76	0.104	0.102	0.110	1.54	1.40	0.3	5.5	7.3	7.0	6.7
February	28.59	29.22	27.71	28.0	36.8	37.9	42.2	25.2	33.7	63	7	21	22	24	76	56	59	.118	.123	.131	.73	.42	4.7	4.4	4.4	5.8	5.5
March	28.62	28.96	27.84	34.0	45.1	46.4	50.0	31.1	40.6	69	14	28	30	30	78	58	56	.155	.174	.178	2.80	1.54	4.9	4.5	5.4	5.3	5.5
April	28.44	28.84	27.96	48.6	62.4	62.1	66.4	45.6	56.0	87	26	39	38	38	70	43	44	.255	.246	.247	.57	.49	.0	4.8	4.8	5.3	4.8
May	28.50	28.85	28.20	59.6	73.0	73.1	77.5	57.7	67.6	93	45	53	54	54	78	53	55	.412	.443	.445	4.13	1.10	.0	5.8	6.6	4.7	6.0
June	28.50	28.77	28.08	68.9	81.3	83.6	86.1	66.8	76.4	101	52	61	59	58	76	51	47	.542	.513	.504	3.99	3.28	.0	4.6	4.7	4.1	4.3
July	28.52	28.75	28.1	72.8	87.3	88.6	92.7	70.9	81.8	106	63	64	62	62	75	45	44	.598	.562	.565	4.77	2.91	.0	4.2	3.4	3.4	3.7
August	28.54	28.75	28.27	74.9	89.8	90.1	94.5	73.5	84.0	105	66	65	62	64	73	45	44	.620	.593	.611	2.86	1.38	.0	3.0	3.4	3.2	3.3
September	28.59	28.96	28.33	63.7	77.8	78.0	81.8	62.3	72.0	96	46	55	55	55	74	48	48	.466	.469	.466	1.80	1.31	.0	3.9	3.6	3.8	3.7
October	28.60	29.07	28.12	50.2	64.2	64.0	69.4	47.5	58.4	87	32	40	40	42	71	44	47	.267	.266	.278	1.12	.71	.0	4.4	3.9	2.7	3.7
November	28.68	29.16	28.16	35.6	46.2	45.8	51.1	32.8	42.0	79	10	27	27	28	72	53	55	.154	.153	.165	1.25	.50	4.9	4.4	5.2	4.8	4.8
December	28.68	29.03	28.23	28.9	36.4	37.0	40.9	26.3	33.6	55	8	24	26	26	80	66	66	.136	.150	.157	.58	.56	T	5.1	4.8	4.6	5.2
Year	28.57	29.22	27.71	48.9	60.4	61.0	65.4	46.3	55.9	106	0	41	41	42	75	53	53	.319	.316	.321	25.64	3.28	14.8	4.6	4.8	4.6	4.8

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

VICKSBURG, MISS.

[H=234 ft.; H_b=247 ft.; h_i=82 ft.; h_r=74 ft.; h_a=102 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temp.		32° temperature or below	Elec- tricity			
																	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted						Hail	Light	Dense	32° or below
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum	Thunderstorm	Aurora			
January	8.4	N.	22	S.	0	22	5	8	13	9	0	1	4	0	0	6	25	21	19	0	0	0	0	1	1	0	0		
February	9.1	N.	35	NW.	1	17	7	5	7	8	5	3	4	0	9	5	14	9	8	0	0	1	0	0	3	0	0		
March	7.6	N.	20	W.	0	16	13	5	7	6	6	5	4	0	8	8	15	13	11	0	0	0	0	2	2	0	0		
April	8.1	S.	35	S.	1	3	4	3	15	16	6	6	7	0	12	6	12	10	8	0	0	0	0	4	0	0	0		
May	6.2	SW.	19	E.	0	2	6	4	4	17	14	10	7	0	11	16	4	6	6	0	0	0	0	5	0	0	0		
June	6.7	SW.	25	NW.	0	2	3	5	9	14	18	2	7	0	7	15	8	9	5	0	0	0	1	0	7	0	0		
July	7.2	SW.	21	NW.	0	7	2	5	7	13	19	3	5	1	7	13	11	4	2	0	0	0	0	15	0	7	0		
August	6.7	SW.	24	E.	0	2	3	9	10	16	10	6	6	0	5	14	12	13	10	0	0	3	1	0	21	0	0		
September	7.6	E.	20	SE.	0	11	9	9	9	6	8	4	4	0	12	11	7	5	4	0	0	3	0	9	0	4	0		
October	8.8	N.	20	SE.	0	12	9	8	8	13	6	3	3	0	13	9	9	12	10	0	0	9	0	0	1	0	0		
November	8.3	N.	28	W.	0	15	7	9	9	5	3	1	11	0	15	1	14	10	9	0	0	3	0	0	5	1	0		
December	8.2	SE.	32	E.	1	12	2	14	15	8	3	1	7	0	4	9	18	13	12	0	0	6	0	1	8	0	0		
Year	7.7	S.	35	NW.	3	121	70	84	113	131	98	42	70	1	103	113	149	125	104	0	0	1	43	9	1	66	19	52	0

WALLA WALLA, WASH.

[H=949 ft.; H_b=991 ft.; h_i=57 ft.; h_r=50 ft.; h_a=65 ft.]

January.....	5.2	S.	23	SE.	0	3	1	4	8	27	11	8	0	0	7	4	20	17	12	21	16	0	0	0	21	0	30	0	0
February.....	6.4	S.	30	W.	0	1	1	1	5	19	22	5	2	0	2	6	20	10	7	9	5	0	5	1	3	0	16	0	0
March.....	5.5	S.	21	W.	0	4	6	2	7	22	9	10	1	1	6	9	16	14	11	0	0	1	3	0	0	0	2	0	1
April.....	7.6	S.	28	W.	0	3	2	2	6	22	12	11	2	0	4	9	17	15	15	1	0	3	0	0	0	0	0	1	0
May.....	6.7	SW.	29	W.	0	7	4	2	7	14	13	10	4	1	16	9	6	4	1	0	0	0	0	0	1	0	0	1	0
June.....	5.2	S.	27	W.	0	7	5	6	12	18	4	5	2	1	13	6	11	10	8	0	0	0	0	0	6	0	5	0	0
July.....	6.1	W.	20	W.	0	2	1	0	5	28	5	20	1	0	26	4	1	2	1	0	0	0	0	0	17	0	2	0	0
August.....	6.0	W.	19	W.	0	3	0	1	2	23	8	22	3	0	22	5	4	3	2	0	0	0	0	0	7	0	2	1	0
September.....	5.3	S.	17	SW.	0	5	1	4	3	29	4	10	4	0	20	5	5	2	1	0	0	0	0	0	8	0	0	0	0
October.....	4.3	S.	15	S.	0	3	1	4	9	16	13	10	4	2	11	7	13	8	5	0	1	3	0	0	0	1	0	0	0
November.....	5.9	S.	22	SW.	0	0	1	2	13	24	14	6	0	0	1	5	24	18	13	0	0	11	5	1	0	3	0	0	0
December.....	5.9	S.	24	W.	0	4	4	1	6	20	12	8	4	3	1	5	25	13	11	4	2	0	12	5	4	0	14	0	0
Year.....	5.8	S.	30	W.	0	42	27	29	83	262	127	125	27	8	129	74	162	116	87	35	23	5	34	11	29	39	65	11	3

WASHINGTON, D. C.

[H=72 ft.; H_b=112 ft.; h_i=62 ft.; h_r=42 ft.; h_a=85 ft.]

January.....	7.4	NE.	21	NW.	0	10	13	7	3	8	6	3	10	2	2	5	24	18	16	2	0	0	20	2	0	0	4	1	0
February.....	8.5	NW.	27	NW.	0	7	4	2	2	10	4	1	25	1	7	10	11	12	8	9	6	0	11	0	1	0	21	1	0
March.....	9.1	NW.	30	NW.	0	4	6	5	4	3	11	6	22	1	11	12	8	8	4	7	5	0	7	0	0	0	12	1	0
April.....	9.2	NW.	24	E.	0	4	5	11	8	4	9	3	15	1	7	12	11	12	11	3	0	1	11	0	0	1	0	2	0
May.....	6.7	NW.	30	W.	0	6	2	3	6	12	13	4	15	1	11	14	6	12	11	0	0	1	6	0	0	1	0	7	0
June.....	6.3	SW.	33	NW.	1	10	2	7	6	7	13	4	8	3	7	14	9	16	13	0	0	1	5	0	0	4	0	11	0
July.....	5.9	NW.	24	NW.	0	7	4	2	3	13	13	3	16	1	8	17	6	12	10	0	0	0	4	0	0	13	0	7	0
August.....	5.5	SW.	22	W.	0	5	8	5	7	12	18	5	2	0	11	10	10	11	10	0	0	10	0	0	10	0	8	0	0
September.....	5.4	NW.	18	NW.	0	13	2	2	2	7	11	4	13	6	16	6	8	7	4	0	0	0	13	1	0	4	0	1	0
October.....	6.8	NW.	22	NW.	0	6	6	7	5	8	8	3	16	3	6	13	12	12	11	0	0	0	13	1	0	0	1	0	0
November.....	7.4	NW.	22	NW.	0	4	1	4	5	6	11	6	17	6	12	11	7	9	6	1	0	0	6	1	0	0	6	0	0
December.....	6.7	NW.	29	NW.	0	10	6	2	2	10	11	7	12	2	10	9	12	6	5	4	1	0	7	2	2	0	14	0	0
Year.....	7.1	NW.	33	NW.	1	86	59	57	53	100	128	49	171	27	108	133	124	135	109	26	12	3	113	7	3	33	58	39	0

WICHITA, KANS.

[H=1,300 ft.; H_b=1,358 ft.; h_i=85 ft.; h_r=78 ft.; h_a=93 ft.]

January.....	11.6	N.	26	SW.	0	11	7	8	9	6	7	1	13	0	7	7	17	7	4	11	2	0	11	2	13	0	30	2	0
February.....	12.2	SW.	32	SW.	2	8	6	3	6	0	17	2	14	0	9	9	10	3	3	8	3	0	2	0	5	0	23	1	0
March.....	12.1	SE.	35	SW.	2	12	13	1	16	2	9	1	8	0	10	9	12	9	6	7	5	0	8	4	5	0	17	4	0
April.....	13.0	N.	34	S.	1	16	2	4	10	8	7	3	10	0	14	6	10	3	2	0	0	0	1	0	0	0	3	3	0
May.....	11.0	SE.	30	NE.	0	7	8	3	20	11	1	2	10	0	5	18	8	11	10	0	0	2	1	0	0	2	0	11	0
June.....	10.3	SE.	27	SE.	0	11	8	5	13	16	4	1	2	0	15	8	7	6	5	0	0	0	4	0	0	12	0	6	0
July.....	11.0	SE.	37	NE.	1	3	5	8	29	8	7	1	1	0	16	12	3	10	6	0	0	1	0	0	0	18	0	10	0
August.....	10.3	SE.	37	NE.	3	2	6	11	25	13	4	0	1	0	19	8	4	7	7	0	0	0	3	0	0	22	0	7	0
September.....	10.1	SE.	32	S.	1	9	8	7	19	12	1	2	2	0	16	9	5	7	3	0	0	6	0	0	4	0	6	6	0
October.....	9.4	SE.	26	N.	0	12	5	4	16	14	4	2	5	0	16	9	6	4	3	0	0	1	7	2	0	1	0	0	0
November.....	9.9	S.	31	SW.	0	11	9	6	7	12	2	3	10	0	13	8	9	4	4	8	3	0	5	3	7	0	14	1	0
December.....	9.3	S.	26	SW.	0	17	2	4	8	13	5	3	10	0	9	13	9	3	2	2	0	0	16	4	6	0	27	0	0
Year.....	10.8	SE.	37	NE.	10	119	79	64	178	115	68	21	86	0	149	116	100	74	55	36	13	4	64	15	36	58	115	51	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

WILLISTON, N. DAK.

[$\phi=48^{\circ}09' N.$; $\lambda=103^{\circ}35' W.$]

Month	Pressure			Temperature								Moisture															
	Extremes			Mean						Extremes		Dew point		Relative humidity		Vapor pressure		Precipitation		Cloudiness							
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	°	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>				
January	28.06	28.51	27.16	-11.2	-5.5	-5.2	0.9	-18.0	-8.6	35	-38	-16	-12	-10	79	71	75	0.021	0.024	0.027	0.50	0.14	5.3	2.7	3.4	4.6	4.0
February	27.95	28.43	27.39	2.6	12.1	13.7	17.3	-2.8	7.2	40	-26	-1	5	8	84	72	74	.045	.059	.068	.20	.08	2.5	3.4	3.4	3.1	3.8
March	28.14	28.51	27.66	20.4	31.8	34.7	37.0	17.9	27.4	59	3	16	19	20	83	67	54	.092	.104	.110	.15	.15	1.6	4.9	2.9	3.4	3.7
April	27.93	28.32	27.48	34.0	49.1	51.0	53.5	32.8	43.2	77	10	29	29	29	82	48	45	.159	.160	.161	.93	.38	5.5	4.9	4.9	4.9	5.2
May	27.96	28.52	27.37	47.6	65.4	67.9	70.4	45.3	57.8	92	29	37	35	34	68	35	30	.223	.212	.204	.50	.30	.0	4.0	3.4	3.1	3.9
June	27.94	28.20	27.56	57.4	74.8	76.0	79.3	54.5	66.9	101	36	45	42	40	66	33	31	.318	.284	.264	.78	.39	.0	3.5	2.5	4.0	3.4
July	27.97	28.26	27.61	65.0	80.3	82.8	85.7	62.5	74.1	108	59	54	52	50	70	41	37	.428	.408	.376	1.75	1.09	.0	4.4	3.1	3.8	3.7
August	27.94	28.28	27.59	61.1	81.4	84.5	87.1	59.7	73.4	103	48	47	44	42	62	29	25	.333	.300	.278	.98	.94	.0	3.0	1.7	1.8	2.1
September	28.03	28.36	27.61	48.4	66.6	67.8	71.8	47.1	59.4	87	30	41	42	41	77	45	43	.263	.277	.262	1.31	.93	.0	4.6	3.5	3.4	4.0
October	28.02	28.52	27.46	39.3	50.6	50.1	55.3	36.5	45.9	80	22	33	35	35	78	57	57	.193	.209	.210	1.61	1.46	T	4.3	4.5	3.9	4.9
November	28.05	28.54	27.45	23.7	30.8	29.4	35.4	19.8	27.6	62	-5	18	20	20	80	66	70	.107	.117	.116	.38	.18	3.2	5.7	4.9	5.0	6.1
December	28.03	28.65	27.35	11.9	17.1	16.6	24.2	5.4	14.8	40	-21	8	10	11	84	71	76	.071	.077	.082	.60	.21	4.9	5.6	4.8	5.6	5.3
Year	28.00	28.65	27.16	33.4	46.2	47.4	51.5	30.1	40.8	108	-38	26	27	27	76	52	51	.188	.186	.180	9.69	1.46	23.0	4.2	3.6	3.9	4.2

WILMINGTON, N. C.

[$\phi=34^{\circ}14' N.$; $\lambda=77^{\circ}57' W.$]

January.....	30.15	30.45	29.82	55.7	62.2	58.5	67.5	51.7	59.6	80	29	52	55	54	90	78	87	0.420	0.453	0.443	4.26	1.83	0.0	8.1	8.0	8.1	8.2
February.....	29.98	30.44	29.36	42.8	51.5	49.2	55.9	39.7	47.8	72	25	36	34	35	76	55	61	.234	.227	.232	5.18	1.57	T	4.9	4.7	5.1	5.1
March.....	29.93	30.41	29.56	46.1	58.0	55.4	63.2	43.1	53.2	78	25	40	40	42	78	52	61	.262	.265	.278	1.87	.65	T	3.9	4.3	3.1	4.0
April.....	29.92	30.36	29.45	58.3	68.1	62.9	71.4	53.6	62.5	82	39	51	50	52	78	55	70	.399	.383	.418	6.74	1.97	.0	3.7	4.4	3.0	4.3
May.....	29.94	30.23	29.70	65.5	76.2	70.4	78.8	60.5	69.6	89	45	59	55	60	80	51	71	.520	.459	.535	2.29	.69	.0	3.0	3.9	3.7	3.5
June.....	29.90	30.14	29.52	75.3	84.0	78.0	86.5	69.9	78.2	94	63	69	66	69	81	56	75	.710	.653	.713	3.93	1.63	.0	4.5	4.6	4.9	4.9
July.....	29.84	30.14	29.72	75.5	84.8	79.4	87.5	72.0	79.8	95	66	71	70	72	87	62	80	.767	.739	.797	6.45	1.78	.0	5.8	5.6	5.8	6.0
August.....	30.02	30.21	29.85	76.1	84.1	79.3	86.5	72.2	79.4	90	66	72	71	73	88	67	81	.794	.768	.812	4.64	1.38	.0	4.1	5.5	4.4	5.1
September.....	29.98	30.28	29.63	67.0	78.3	72.9	81.2	64.4	78.3	91	56	63	62	65	87	60	76	.590	.575	.623	2.13	.65	.0	4.4	4.4	4.0	4.8
October.....	29.98	30.42	29.41	56.9	68.7	63.1	71.9	53.6	62.8	88	38	52	50	54	84	54	72	.423	.407	.451	1.78	.50	.0	5.1	4.1	3.9	4.5
November.....	30.04	30.60	29.44	46.7	56.9	54.0	62.3	43.3	52.8	77	28	42	42	45	83	54	72	.296	.298	.322	6.17	4.42	.0	3.9	4.8	3.6	4.7
December.....	30.10	30.46	29.60	40.2	50.6	47.0	54.8	37.6	46.2	72	22	34	34	36	79	56	67	.215	.219	.232	2.14	1.26	T	4.8	4.9	4.7	4.8
Year.....	29.99	30.60	29.36	58.8	68.6	64.2	72.3	55.1	63.7	95	22	53	52	55	83	58	73	.469	.454	.488	47.58	4.42	T	4.7	4.9	4.6	5.0

WINNEMUCCA, NEV.

[$\phi=40^{\circ}58' N.$; $\lambda=117^{\circ}43' W.$]

January.....	25.56	25.97	25.16	3.9	17.3	17.2	22.8	-3.4	9.7	37	-36	2	12	12	92	76	77	0.054	0.077	0.074	1.42	0.48	25.7	5.8	6.0	5.6	6.4
February.....	25.59	25.92	24.91	20.3	33.6	34.6	38.8	13.5	26.2	47	-13	18	24	25	91	66	67	.107	.126	.133	1.14	.75	11.8	5.1	6.2	6.5	6.2
March.....	25.55	26.00	25.08	33.1	48.6	49.4	53.4	29.0	41.2	63	21	28	30	30	84	49	47	.155	.164	.164	1.28	.58	4.0	4.6	6.0	6.5	5.9
April.....	25.58	25.86	25.00	34.8	53.7	55.6	58.6	30.2	44.4	75	20	27	26	24	73	36	31	.144	.139	.132	1.29	.53	2.1	4.2	5.6	5.7	5.1
May.....	25.56	25.93	25.30	43.7	69.9	71.0	75.5	41.0	58.2	88	32	32	31	29	63	26	24	.178	.177	.164	1.03	.49	2.0	3.6	3.6	5.1	3.9
June.....	25.59	25.78	25.36	49.5	74.2	76.5	80.0	47.3	63.6	98	37	35	36	34	60	28	22	.214	.218	.202	.14	.07	.0	4.9	5.2	4.4	4.3
July.....	25.61	25.78	25.39	58.6	88.8	89.6	94.5	56.3	75.4	102	46	39	38	37	50	17	17	.247	.232	.231	.30	.25	.0	1.2	2.8	4.5	3.2
August.....	25.63	25.87	25.39	53.7	85.9	87.4	91.4	50.4	70.9	101	38	30	32	30	41	15	13	.169	.180	.170	.00	.00	.0	1.1	1.5	1.2	1.2
September.....	25.63	25.97	25.29	45.7	78.4	79.7	83.4	41.5	62.4	95	28	27	32	30	50	19	17	.149	.179	.168	.09	.06	.0	1.4	1.2	1.7	1.8
October.....	25.68	25.94	25.29	35.3	65.8	66.0	70.9	30.9	50.9	80	20	24	32	31	62	31	31	.132	.183	.177	.38	.26	.0	1.6	3.1	2.5	2.7
November.....	25.66	25.92	25.34	33.4	51.2	49.4	55.4	28.8	42.1	66	19	26	30	30	74	46	50	.143	.167	.168	1.17	.80	.0	4.5	5.5	5.8	5.5
December.....	25.70	26.05	25.18	25.8	40.4	39.6	45.6	21.3	33.4	62	8	23	28	30	91	64	72	.128	.157	.171	1.11	.63	10.6	3.5	6.3	6.1	6.0
Year.....	25.61	26.08	24.91	36.5	59.0	59.7	64.2	32.2	48.2	102	-36	26	29	28	69	39	39	.152	.167	.163	9.35	.80	56.2	3.5	4.4	4.6	4.4

WYTHEVILLE, VA.

[$\phi=36^{\circ}56' N.$; $\lambda=81^{\circ}05' W.$]

January.....	27.77	28.16	27.31	40.1	45.4	44.5	50.8	35.0	42.9	71	22	37	38	38	88	76	80	0.232	0.237	0.244	6.05	1.18	0.0	8.4	8.7	7.8	8.5
February.....	27.58	27.94	27.02	29.8	38.3	35.5	42.9	25.5	34.2	72	12	24	25	26	77	60	68	.136	.148	.149	2.29	.76	8.5	6.3	6.3	6.2	6.4
March.....	27.57	27.99	27.21	33.5	44.9	42.6	50.3	30.3	40.3	68	13	27	28	28	76	54	58	.153	.162	.163	.76	.29	1.1	6.5	5.4	3.9	5.4
April.....	27.57	27.96	27.18	45.1	55.6	54.0	61.8	40.4	51.1	83	29	37	36	36	75	52	56	.233	.227	.233	2.80	.93	T	7.0	6.2	6.3	5.9
May.....	27.65	27.92	27.36	55.6	69.1	65.0	73.2	48.7	61.0	88	36	48	45	47	76	44	55	.352	.317	.346	2.70	1.39	.0	4.6	5.0	5.1	4.8
June.....	27.62	27.85	27.33	65.3	76.4	72.4	80.4	59.1	69.8	98	52	59	58	60	82	55	65	.511	.491	.514	3.77	.91	.0	5.9	6.3	6.6	6.1
July.....	27.69	27.88	27.47	65.5	76.5	72.7	80.8	60.2	70.5	91	50	61	60	62	85	58	70	.536	.524	.554	1.98	.49	.0	4.9	6.5	6.7	6.2
August.....	27.74	27.95	27.59	65.4	79.1	72.6	82.7	60.1	72.4	90	52	63	63	64	92	59	77	.576	.574	.608	9.54	2.24	.0	4.8	6.5	6.3	6.0
September.....	27.72	28.10	27.39	54.7	68.4	63.3	72.6	51.1	61.8	88	38	52	53	55	93	60	73	.410	.420	.442	.76	.22	.0	4.5	3.9	4.4	4.7
October.....	27.66	28.08	27.14	44.9	54.9	50.8	58.5	40.5	49.5	78	26	40	42	42	83	64	73	.267	.287	.290	8.58	3.10	2.9	6.6	7.2	5.6	6.8
November.....	27.69	28.18	27.20	33.8	46.1	41.2	49.7	30.1	39.9	68	11	28	29	30	80	54	67	.164	.175	.183	1.03	.52	T	6.3	5.7	5.4	5.9
December.....	27.70	28.09	27.23	30.6	38.1	35.3	42.1	26.6	34.4	59	7	27	28	29	86	68	77	.157	.163	.168	1.50	.41	2.9	6.5	6.0	5.6	6.2
Year.....	27.66	28.16	27.02	47.0	57.7	54.2	62.2	42.5	52.3	91	7	42	42	43	83	59	68	.311	.310	.324	41.76	3.10	15.4	6.0	6.1	5.8	6.1

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

WILLISTON, N. DAK.

[H=1,877 ft.; H_b=1,878 ft.; h₁=42 ft.; h_r=34 ft.; h_a=50 ft.]

Month	Wind														Number of days															
	By self-register					Number of times, 7:30 a. m. and 7:30 p. m., wind observed from									Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temp.	32° or above	Minimum temperature or below	Electricity			
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm				0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above		Thunderstorm	Aurora	
January	6.6	SW.	30	NW.	0	13	10	1	4	3	13	11	6	1	17	6	8	10	5	16	10	0	2	1	30	0	31	0	0	5
February	8.3	NW.	32	NW.	1	5	4	1	7	3	11	9	16	0	12	12	4	7	2	11	7	0	1	1	22	0	28	0	0	3
March	8.4	SE.	24	S.	0	7	10	10	13	5	5	8	4	0	16	10	5	1	1	7	1	0	2	0	9	0	29	0	0	6
April	9.6	SE.	30	W.	0	6	4	9	16	4	2	9	10	0	11	9	10	8	5	3	3	0	1	1	2	0	11	0	0	2
May	10.3	SE.	34	NW.	3	12	7	4	16	6	2	9	6	0	15	13	3	7	4	0	0	0	0	0	0	1	2	4	2	3
June	9.6	SE.	30	NW.	0	5	6	10	9	9	8	6	7	0	16	11	3	7	4	0	0	0	0	0	0	6	0	3	5	5
July	7.6	SE.	29	SE.	0	8	9	9	13	8	4	4	6	1	16	11	4	10	3	0	0	0	4	1	0	10	0	8	3	3
August	7.9	SE.	46	W.	1	7	6	7	10	9	5	10	7	1	23	8	0	3	1	0	0	0	0	0	0	12	0	4	5	5
September	8.5	SE.	27	SE.	0	9	10	11	9	5	3	3	10	0	15	10	5	6	4	0	0	0	0	0	0	0	1	2	3	3
October	9.2	SE.	32	NW.	1	7	8	3	9	7	6	9	13	0	13	9	9	5	4	2	0	0	1	0	0	0	9	1	9	9
November	8.9	NW.	32	NW.	1	9	2	6	9	9	3	8	14	0	9	8	13	7	3	14	5	0	1	0	14	0	27	0	2	2
December	8.0	NW.	34	NW.	1	6	5	3	10	7	7	13	11	0	10	13	8	11	4	15	9	0	0	0	19	0	31	0	1	1
Year	8.6	SE.	46	W.	8	94	81	74	125	75	69	99	110	3	173	120	72	82	40	68	35	0	12	4	96	29	169	22	47	47

WILMINGTON, N. C.

[H=6 ft.; H_b=72 ft.; h₁=73 ft.; h_r=65 ft.; h_a=107 ft.]

January	9.6	NE.	27	S.	0	9	20	2	1	12	13	0	4	1	0	9	22	17	12	0	0	0	23	9	0	0	0	1	0	0
February	10.9	N.	33	NW.	1	17	6	3	2	12	9	4	0	0	11	7	10	11	10	1	0	0	15	1	0	0	8	1	0	0
March	9.8	NW.	30	S.	0	9	7	4	4	5	10	10	12	1	17	9	5	8	7	1	0	0	19	1	0	0	3	0	0	0
April	11.5	SW.	30	SW.	0	7	5	6	6	7	17	6	6	0	17	3	10	11	11	0	0	0	14	0	0	0	0	8	0	0
May	9.1	SW.	27	S.	0	5	11	6	6	11	20	1	1	1	16	14	1	5	5	0	0	0	5	2	0	0	0	9	0	0
June	9.0	SW.	31	S.	0	7	3	4	4	6	25	8	3	0	7	20	3	9	7	0	0	0	5	0	0	5	0	15	0	0
July	8.5	SW.	30	NW.	0	5	0	2	6	1	30	5	13	0	5	20	6	17	13	0	0	0	15	1	0	9	0	15	0	0
August	7.4	S.	24	S.	0	8	8	7	6	13	9	7	4	0	7	19	5	18	12	0	0	0	13	1	0	0	0	12	0	0
September	7.7	NE.	19	SW.	0	13	23	1	1	8	5	1	7	1	12	11	5	8	7	0	0	0	18	0	0	1	0	3	0	0
October	8.8	NE.	24	NW.	0	11	16	4	1	10	5	10	2	3	14	8	9	14	10	0	0	0	13	2	0	0	0	0	0	0
November	8.5	NE.	24	NW.	0	15	15	4	1	7	6	2	10	0	15	2	13	11	9	0	0	0	17	3	0	0	4	0	0	0
December	8.0	N.	29	SW.	0	22	12	2	0	8	7	5	6	0	12	9	10	10	7	2	0	0	17	3	0	0	7	1	0	0
Year	9.0	SW.	33	NW.	1	128	126	45	39	90	159	64	72	7	133	131	101	139	110	4	0	0	179	23	0	15	22	65	0	0

WINNEMUCCA, NEV.

[H=4,287 ft.; H_b=4,344 ft.; h₁=18 ft.; h_r=6 ft.; h_a=56 ft.]

January	7.6	NE.	24	SW.	0	3	28	2	0	5	20	3	1	0	8	6	17	13	9	23	13	0	4	0	26	0	31	0	0	0
February	8.5	NE.	32	NW.	1	3	23	2	2	5	16	5	0	0	7	10	11	8	6	14	7	0	1	0	5	0	28	0	0	0
March	8.7	NE.	22	S.	0	5	25	0	0	5	20	3	4	0	7	12	12	9	7	9	7	0	2	1	0	0	25	1	0	0
April	8.9	SW.	30	NW.	0	5	8	3	2	6	19	9	8	0	11	9	10	7	5	9	4	0	0	0	0	0	22	1	0	0
May	8.2	NE.	28	N.	0	3	16	3	1	6	11	13	9	0	15	10	6	4	3	1	1	0	0	0	0	0	0	1	0	0
June	8.2	NE.	26	NW.	0	4	18	1	3	5	19	7	3	0	14	8	8	5	2	0	0	0	0	0	0	6	0	3	0	0
July	7.6	SW.	32	SE.	1	3	18	1	2	2	24	8	4	0	18	12	1	5	1	0	0	0	0	0	0	26	0	7	0	0
August	7.4	SW.	23	SW.	0	2	13	1	0	8	21	13	4	0	27	4	0	0	0	0	0	0	0	0	0	22	0	0	0	0
September	7.3	NE.	23	NW.	0	8	14	0	0	3	17	13	5	0	24	6	0	2	1	0	0	0	0	0	0	10	4	2	0	0
October	7.4	NE.	30	S.	0	10	19	1	1	1	16	9	5	0	21	6	4	4	2	0	0	0	1	0	0	0	20	0	0	0
November	7.8	SW.	31	SW.	0	6	9	2	0	4	32	5	2	0	12	5	13	5	5	0	0	0	0	0	0	0	20	0	0	0
December	7.2	SW.	30	SW.	0	5	15	3	1	9	24	2	3	0	9	7	15	7	6	3	2	0	8	5	2	0	28	0	0	0
Year	7.9	SW.	32	SE.	2	57	206	19	12	59	239	90	48	0	173	95	97	69	47	59	34	0	16	6	33	64	178	15	0	0

WYTHEVILLE, VA.

[H=2,299 ft.; H_b=2,304 ft.; h₁=49 ft.; h_r=40 ft.; h_a=55 ft.]

January	6.5	E.	27	W.	0	3	13	16	2	0	6	14	7	1	2	6	23	19	16	0	0	0	15	5	0	0	8	0	0
February	8.6	W.	30	W.	0	1	2	8	1	1	5	26	11	1	7	8	13	15	8	11	8	0	5	2	3	0	23	0	0
March	8.8	W.	28	W.	0	0	1	7	0	0	6	27	21	0	9	12	10	8	5	7	2	0	5	0	2	0	19	0	0
April	8.2	W.	29	S.	0	2	0	10	3	3	6	24	12	0	9	8	13	14	9	3	0	0	3	0	0	0	6	3	0
May	6.4	W.	23	W.	0	3	5	4	2	1	9	25	13	0	11	12	8	9	6	0	0	0	2	0	0	0	0	7	0
June	5.8	W.	21	W.	0	7	3	2	1	1	8	24	13	1	4	17	9	17	14	0	0	0	5	2	0	0	0	16	0
July	5.2	W.	20	SW.	0	4	5	6	2	1	11	28	4	1	7	11	13	18	12	0	0	0	7	3	0	1	0	13	0
August	4.8	W.	21	NW.	0	2	7	13	6	1	9	18	5	1	6	13	12	16	16	0	0	0	14	5	0	2	0	9	0
September	4.6	E.	20	W.	0	5	5	20	2	2	5	11	9	1	14	8	8	11	6	0	0	0	12	6	0	0	0	4	0
October	6.7	W.	24	W.	0	3	6	10	6	0	5	21	11	0	7	7	17	13	12	2	2	0	4	1	0	0	5	0	0
November	7.0	W.	26	W.	0	0	4	7	2	0	5	28	14	0	11	4	15	8	5	3	0	0	2	0	3	0	16	0	0
December	7.4	W.	24	W.	0	2	6	5	0	2	5	29	13	0	11	5	15	14	7	7	6	0	8	2	7	0	21	0	0
Year	6.7	W.	30	W.	0	32	57	108	27	12	80	275	133	6	98	111	156	162	116	33	18	0	82	26	15	3	98	52	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

YAKIMA, WASH.

[$\phi=46^{\circ}36'$ N.; $\lambda=120^{\circ}30'$ W.]

Month	Pressure			Temperature								Moisture																
	Extremes			Mean						Extremes		Dew point	Relative humidity	Vapor pressure			Precipitation			Cloudiness								
	Monthly mean	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snow fall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight				
<i>In.</i>	<i>In.</i>	<i>In.</i>	"	"	"	"	"	"	"	"	"	"	"	%	%	%	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	"	"	"				
January	28.96	29.42	28.33	11.7	19.7	20.1	23.1	6.8	15.0	42	-7	6	9	11	78	61	64	0.056	0.064	0.069	0.85	0.34	10.0	6.7	5.7	6.3	6.3	
February	28.79	29.22	28.32	25.0	36.1	37.2	39.9	20.1	30.0	56	0	20	23	25	80	59	61	.111	.127	.135	1.03	.58	13.4	6.4	6.9	5.2	6.9	
March	28.82	29.26	28.40	39.6	52.0	53.7	55.7	36.9	46.3	65	28	32	32	32	74	47	46	.180	.180	.186	.91	.39	0.1	6.2	6.8	6.6	7.1	
April	28.82	29.16	28.38	42.4	56.6	57.8	60.3	40.0	50.2	73	32	31	30	29	66	37	35	.177	.170	.163	1.46	.78	T	5.5	6.3	6.1	6.4	
May	28.84	29.22	28.36	49.7	68.5	70.8	73.2	47.3	60.2	88	36	34	30	31	55	25	24	.196	.170	.177	T	T	T	3.7	3.1	3.2	3.6	
June	28.82	29.10	28.46	57.3	73.9	74.9	78.3	54.9	66.6	98	46	45	43	43	66	38	38	.308	.287	.293	2.73	.70	.0	4.7	5.4	5.6	5.6	
July	28.83	29.07	28.56	63.9	83.9	87.1	89.8	62.0	75.9	100	50	46	43	44	54	24	24	.319	.282	.294	T	T	T	0	0.8	1.1	1.7	1.4
August	28.85	29.11	28.59	57.4	77.0	80.3	82.3	54.8	68.6	98	47	45	42	42	65	30	29	.308	.273	.281	.33	.16	.0	2.1	2.2	2.6	2.4	
September	28.85	29.37	28.52	55.9	74.1	76.6	78.5	53.1	65.8	94	37	44	44	45	66	36	35	.297	.299	.313	.88	.85	.0	1.6	3.6	3.4	3.2	
October	28.90	29.30	28.50	48.5	65.3	66.1	68.9	44.5	56.7	77	33	40	41	42	74	42	43	.251	.262	.273	.16	.14	.0	4.3	4.5	5.4	5.1	
November	28.85	29.25	28.36	39.6	48.5	47.7	50.6	36.1	43.4	62	26	34	36	36	82	65	67	.201	.215	.217	1.57	.37	2.0	6.6	7.3	7.5	7.7	
December	28.93	29.51	28.20	33.1	38.1	37.4	40.3	30.1	35.2	57	23	30	30	30	87	74	76	.163	.168	.168	1.64	.80	8.7	7.5	7.5	7.3	8.0	
Year	28.85	29.51	28.20	43.7	57.8	59.1	61.7	40.6	51.2	100	-7	34	34	34	71	45	45	.214	.208	.214	11.56	.85	34.2	4.7	5.0	5.1	5.3	

YELLOWSTONE PARK, WYO.

[$\phi=44^{\circ}58'$ N.; $\lambda=110^{\circ}42'$ W.]

January.....	23.67	23.99	23.35	-1.8	5.4	5.0	12.0	-7.7	2.2	27	-30	-9	-2	-3	70	68	67	0.031	0.039	0.039	0.83	0.17	15.4	6.8	6.6	7.5	6.9
February.....	23.73	24.07	23.12	15.0	23.0	21.4	26.6	9.0	17.8	40	-13	9	14	12	74	67	65	.064	.083	.074	1.30	.33	18.6	7.1	8.1	8.4	7.9
March.....	23.82	24.29	23.36	20.1	33.1	33.2	37.5	16.7	27.1	55	-4	16	21	20	83	61	59	.090	.113	.105	1.34	.30	21.3	6.2	7.0	7.1	7.1
April.....	23.78	24.10	23.24	28.4	42.1	41.3	45.6	24.8	35.2	66	9	20	24	24	71	50	54	.109	.127	.131	1.54	.35	13.7	6.0	8.1	7.7	7.3
May.....	23.87	24.18	23.57	37.6	58.7	58.9	62.8	35.9	49.4	74	28	30	30	30	73	35	36	.164	.165	.169	.75	.25	T	4.2	6.1	5.9	5.3
June.....	23.94	24.15	23.65	44.0	61.6	61.1	65.4	41.5	53.4	87	29	36	36	36	76	44	45	.218	.218	.217	2.35	.85	1.8	6.7	6.7	7.4	6.7
July.....	24.01	24.20	23.82	50.7	73.3	71.4	77.2	49.0	63.1	86	38	44	44	45	78	38	43	.287	.294	.306	2.42	.90	.0	3.9	5.7	6.6	5.5
August.....	23.98	24.24	23.78	49.2	74.0	75.2	77.3	46.7	62.0	86	35	36	34	33	61	25	22	.212	.203	.189	.35	.73	.0	2.3	3.2	4.5	3.2
September.....	23.99	24.26	23.72	42.5	65.1	64.5	69.1	39.6	54.4	81	24	34	35	34	73	36	35	.198	.207	.201	1.11	.64	.6	3.3	4.8	5.0	4.6
October.....	23.96	24.27	23.57	36.2	53.8	51.0	58.4	32.5	45.4	68	23	28	30	30	73	43	47	.154	.168	.163	.52	.23	.3	3.3	4.0	3.9	4.0
November.....	23.89	24.18	23.52	27.0	36.5	32.6	39.7	22.2	31.0	53	7	20	22	21	75	56	62	.110	.119	.111	.47	.14	8.7	6.6	7.4	7.5	7.5
December.....	23.87	24.27	23.36	21.1	27.0	24.9	30.5	14.5	22.5	44	-11	15	18	17	75	66	70	.090	.101	.096	1.34	.46	14.4	6.5	8.0	7.0	7.8
Year.....	23.88	24.29	23.12	30.8	46.1	45.0	50.2	27.1	38.6	87	-30	23	26	25	74	49	50	.144	.153	.150	14.32	0.90	94.8	5.2	6.3	6.5	6.2

YUMA, ARIZ.

[$\phi=32^{\circ}45'$ N.; $\lambda=114^{\circ}36'$ W.]

January.....	29.92	30.23	29.48	37.9	54.1	54.4	55.9	33.9	44.9	67	22	26	27	26	62	34	33	0.145	0.148	0.144	0.14	0.10	T	2.5	2.3	2.5	2.5
February.....	29.89	30.27	29.40	49.7	68.0	69.3	70.8	44.9	57.8	80	32	31	29	28	50	24	22	.182	.165	.156	.08	.06	0.0	2.5	3.0	3.1	2.8
March.....	29.78	30.11	29.50	52.7	74.2	76.2	77.7	48.9	63.3	90	42	38	33	31	59	25	21	.229	.193	.180	1.47	1.47	.0	1.4	2.6	2.5	2.3
April.....	29.74	29.98	29.42	57.9	82.5	84.7	86.2	54.1	70.2	101	49	36	29	27	48	15	13	.225	.163	.150	.00	.00	.0	1.1	1.3	1.5	1.1
May.....	29.62	29.87	29.38	63.5	90.1	93.5	95.3	60.9	78.1	110	52	48	40	36	58	20	15	.340	.257	.220	T	T	.0	0.7	1.4	1.4	1.1
June.....	29.62	29.77	29.44	70.9	97.2	100.7	102.7	68.6	85.6	112	72	64	62	62	57	28	26	.413	.321	.299	.09	.09	.0	0.7	0.6	0.9	0.6
July.....	29.62	29.88	29.38	81.5	102.6	104.6	107.3	78.4	92.8	117	72	64	62	62	57	28	26	.601	.567	.561	.46	.42	.0	2.5	1.9	1.6	1.7
August.....	29.62	29.83	29.43	82.1	102.5	104.8	107.7	79.2	93.4	113	69	66	63	61	59	29	25	.648	.578	.540	T	T	.0	1.4	1.2	1.2	1.0
September.....	29.63	29.85	29.42	78.8	99.2	99.5	103.6	75.7	89.6	112	61	66	62	61	67	31	31	.655	.574	.552	1.71	1.60	.0	0.7	0.9	1.5	0.7
October.....	29.71	29.86	29.57	63.5	89.5	88.3	93.1	60.6	76.8	100	53	47	44	47	57	22	26	.339	.305	.342	.00	.00	.0	0.5	1.1	1.9	1.2
November.....	29.83	30.05	29.62	51.9	74.3	73.3	79.6	48.6	64.1	90	43	40	38	41	65	25	32	.250	.236	.264	.00	.00	.0	0.9	2.4	2.3	1.6
December.....	29.88	30.17	29.59	52.8	69.2	67.2	71.3	49.3	60.3	78	34	39	38	39	63	34	38	.250	.243	.252	.35	.14	.0	2.2	2.4	3.8	2.7
Year.....	29.74	30.27	29.38	61.9	83.6	84.7	87.6	58.6	73.1	117	22	46	42	42	58	25	25	.356	.312	.305	4.30	1.60	T	1.4	1.8	2.0	1.6

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

YAKIMA, WASH.

[H=1,068 ft.; H_b=1,076 ft.; h_i=58 ft.; h_r=52 ft.; h_a=67 ft.]

Month	Wind													Number of days																	
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog	Maximum temp.		32° or below	32° or above	Thunderstorm	Elec- tricity				
																	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted		Light	Dense					32° or below	90° or above		
	Average hourly ve- locity	Prevailing direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm																	
January	4.5	NW.	27	NE.	0	5	8	3	13	10	7	8	6	2	7	12	12	13	7	18	13	0	7	0	0	31	0	0			
February	4.8	NW.	23	NW.	0	8	2	2	10	5	6	8	15	0	3	13	12	6	3	8	4	0	3	0	7	0	23	0	0		
March	5.8	NW.	22	NE.	0	10	6	1	7	6	6	6	20	0	4	9	18	9	5	3	1	0	5	0	0	0	6	1	0		
April	7.4	NW.	29	NW.	0	4	4	3	7	3	9	5	24	1	3	16	11	6	4	2	0	0	0	0	0	0	0	0	0	0	
May	8.0	NW.	27	SW.	0	4	1	3	6	1	5	10	31	1	19	8	4	0	0	0	0	0	0	0	0	0	0	0	0	2	
June	6.4	NW.	28	NE.	0	2	3	2	11	5	3	7	28	1	11	4	15	12	9	0	0	0	0	0	0	0	5	0	3	0	
July	7.7	NW.	30	NW.	0	3	1	1	4	3	5	8	37	0	25	6	0	0	0	0	0	0	0	0	0	19	0	3	0	0	
August	6.1	NW.	25	NW.	0	3	2	1	4	1	7	14	22	0	22	5	4	5	3	0	0	0	0	0	0	7	0	1	1	0	
September	6.4	NW.	21	NW.	0	2	3	2	6	6	5	13	23	0	18	7	5	3	2	0	0	0	0	0	0	4	0	0	0	0	
October	4.9	NW.	23	S.	0	7	3	2	8	10	9	7	16	0	10	12	9	3	1	0	0	0	2	0	0	0	0	0	0	3	0
November	5.0	NW.	21	SW.	0	3	5	4	13	5	8	9	13	0	4	4	22	10	9	2	2	0	10	3	0	0	7	0	0	0	0
December	4.8	SE.	25	SW.	0	3	1	4	13	11	1	17	10	2	3	7	21	11	6	6	5	0	11	6	2	0	23	0	0	0	0
Year	6.0	NW.	29	NW.	0	59	39	31	102	66	71	112	243	7	129	103	133	78	49	39	25	0	38	9	36	35	90	8	6	0	0

YELLOWSTONE PARK, WYO.

[H=6,235 ft.; H_b=6,235 ft.; h_i=12 ft.; h_r=3 ft.; h_a=46 ft.]

January.....	8.0	S.	34	SW.	1	4	4	2	2	17	21	11	1	0	6	5	20	15	9	21	15	0	0
February.....	10.5	SW.	32	SW.	2	3	4	0	2	11	26	6	4	0	1	8	19	13	11	25	13	0	0
March.....	7.5	SW.	27	SW.	0	6	7	2	1	8	24	7	6	1	5	7	19	14	10	19	14	0	0
April.....	8.7	SW.	32	SW.	1	6	4	0	3	13	23	3	8	0	5	5	20	16	9	18	13	0	0
May.....	8.4	SW.	32	SW.	1	5	2	1	0	4	25	14	11	0	8	16	7	7	5	1	1	0	0
June.....	8.3	SW.	30	NW.	0	7	6	2	2	12	16	8	6	1	4	9	17	11	9	3	2	3	0
July.....	7.1	SW.	27	SW.	0	2	0	1	2	11	27	13	6	0	10	11	10	13	10	0	0	3	0
August.....	8.8	SW.	30	SW.	0	3	1	0	0	7	34	14	3	0	19	10	2	3	1	0	0	0	0
September.....	7.0	SW.	32	SW.	1	4	2	1	2	5	27	10	9	0	14	9	7	10	3	2	2	0	0
October.....	7.2	SW.	29	SW.	0	5	1	0	0	9	28	9	8	2	15	10	6	6	3	5	3	0	0
November.....	7.7	SW.	27	SW.	0	4	4	0	1	17	24	6	4	0	5	5	20	13	4	19	12	0	0
December.....	9.2	S.	41	SW.	2	4	2	2	1	18	24	6	4	1	4	4	23	19	10	23	17	0	0
Year.....	8.2	SW.	41	SW.	8	53	37	11	16	132	299	107	70	5	96	99	170	140	84	136	92	7	4

YUMA, ARIZ.

[H=138 ft.; H_b=142 ft.; h_i=9 ft.; h_r=2 ft.; h_a=54 ft.]

January.....	6.7	N.	29	W.	0	27	4	5	3	3	1	9	7	3	22	5	4	3	1	1	0	0	0
February.....	6.6	N.	26	W.	0	19	9	7	1	3	0	12	4	1	19	4	5	3	1	0	0	0	0
March.....	6.4	W.	29	NW.	0	11	3	9	2	9	4	18	5	1	21	6	4	1	1	0	0	0	0
April.....	6.9	W.	28	W.	0	18	2	5	2	4	15	9	5	0	27	2	1	0	0	0	0	0	0
May.....	5.4	SW.	20	NW.	0	5	0	3	6	14	12	12	7	3	26	5	0	0	0	0	0	0	0
June.....	5.3	W.	20	SE.	0	3	1	4	3	10	18	14	4	3	28	2	0	2	1	0	0	0	0
July.....	5.6	SW.	24	E.	0	4	2	3	11	9	17	15	0	1	26	5	0	5	1	0	0	0	0
August.....	6.1	S.	20	S.	0	0	3	5	10	12	19	9	2	2	28	3	0	0	0	0	0	0	0
September.....	5.3	N.	24	NE.	0	1	4	3	13	13	11	6	6	3	27	3	0	2	2	0	0	0	0
October.....	4.2	N.	19	N.	0	6	4	9	10	4	11	10	7	1	25	6	0	0	0	0	0	0	0
November.....	4.2	NE.	20	NW.	0	9	16	10	3	2	5	11	3	1	23	7	0	0	0	0	0	0	0
December.....	6.8	N.	27	N.	0	29	9	5	3	0	3	4	6	3	21	5	5	5	3	0	0	0	0
Year.....	5.8	W.	29	NW.	0	132	57	68	67	83	116	129	56	22	293	53	19	21	10	1	0	0	0

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

BARROW, ALASKA																												
[φ=71°23' N.; λ=156°17' W.]																												
Month	Pressure			Temperature										Moisture														
	Extremes			Mean							Extremes		Dew point	Relative humidity	Vapor pressure			Precipitation			Cloudiness							
	Monthly mean ²	Maximum	Minimum	7:30 a. m. ¹	Noon, local time	7:30 p. m. ¹	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m. ¹			Noon, local time	7:30 p. m. ¹	7:30 a. m. ¹	Noon, local time	7:30 p. m. ¹	7:30 a. m. ¹	Noon, local time	7:30 p. m. ¹	Total	Maximum in 24 hours	Total snowfall un-melted	7:30 a. m. ¹	Noon, local time	7:30 p. m. ¹
In.	In.	In.	°	°	°	°	°	°	°	°	°	°	°	%	%	%	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
January	29.95	30.86	29.07	-4.2	-4.3	43.3	-12.3	-4.5	26	-34	26	-34	26	---	---	---	---	---	---	---	0.88	0.70	9.0	4.9	---	4.8	4.9	
February	29.88	30.77	29.33	-14.6	-14.6	38.3	-18.8	-14.2	22	-37	22	-37	22	---	---	---	---	---	---	---	---	---	---	---	---	2.1	2.6	
March	30.24	30.96	29.21	-17.6	-12.5	38.2	-21.8	-15.0	8	-40	8	-40	8	---	---	---	---	---	---	---	---	---	---	---	---	2.4	2.4	
April	29.91	30.46	29.51	-6.5	1.1	5.2	-11.5	-3.2	30	-32	30	-32	30	---	---	---	---	---	---	---	---	---	---	---	---	2.5	2.8	
May	29.92	30.22	29.56	19.3	23.5	26.2	16.5	21.4	42	-6	42	-6	42	---	---	---	---	---	---	---	---	---	---	---	---	7.9	8.0	
June	29.80	30.12	29.51	33.3	38.3	41.3	31.9	36.6	52	23	52	23	52	---	---	---	---	---	---	---	---	---	---	---	---	5.2	5.2	
July	29.89	30.33	29.37	35.4	41.5	43.7	34.0	38.8	54	28	54	28	54	---	---	---	---	---	---	---	---	---	---	---	---	3.4	3.4	
August	29.78	30.19	29.24	33.6	38.5	42.1	31.9	37.0	65	26	65	26	65	---	---	---	---	---	---	---	---	---	---	---	---	6.9	7.1	
September	29.81	30.38	29.20	31.8	34.8	36.9	29.6	33.2	58	21	58	21	58	---	---	---	---	---	---	---	---	---	---	---	---	7.2	7.3	
October	29.85	30.17	29.14	19.9	21.7	25.0	17.0	21.0	39	0	39	0	39	---	---	---	---	---	---	---	---	---	---	---	---	6.7	6.7	
November	29.96	30.66	29.24	8.4	8.8	15.1	2.9	9.0	39	-16	39	-16	39	---	---	---	---	---	---	---	---	---	---	---	---	5.3	5.3	
December	30.30	31.12	29.50	-4.9	-6.0	2.8	-12.6	-4.9	27	-35	27	-35	27	---	---	---	---	---	---	---	---	---	---	---	---	---	4.6	4.6
Year	29.94	30.52	29.35	11.2	14.2	18.6	7.2	12.9	65	-4.0	65	-4.0	65	---	---	---	---	---	---	---	3.25	70	25.0	5.1	---	4.9	5.0	

DUTCH HARBOR, ALASKA																											
[φ=53°53' N.; λ=166°32' W.]																											
January	30.13	30.84	29.50	40.9	42.6	---	46.0	36.2	41.1	55	26	---	---	---	---	---	---	---	---	---	6.21	1.48	0.0	5.5	7.3	---	6.4
February	29.82	30.42	28.67	32.6	35.2	---	37.3	28.7	33.0	47	18	---	---	---	---	---	---	---	---	---	3.61	.62	---	6.1	7.0	---	6.6
March	29.79	30.47	29.06	34.8	37.6	---	40.1	31.4	35.8	48	24	---	---	---	---	---	---	---	---	---	3.79	1.19	---	6.6	8.1	---	7.4
April	29.88	30.64	28.94	34.7	39.0	---	41.0	31.2	36.1	53	22	---	---	---	---	---	---	---	---	---	2.61	.75	11.5	7.4	8.2	---	7.8
May	29.59	30.50	28.96	38.1	42.4	---	43.9	35.7	39.8	51	30	---	---	---	---	---	---	---	---	---	11.09	2.74	T	8.7	9.3	---	9.0
June	29.73	30.37	29.08	43.1	48.0	---	50.1	40.9	45.5	58	34	---	---	---	---	---	---	---	---	---	2.01	0.64	T	8.9	8.8	---	8.8
July	29.81	30.32	29.48	47.7	53.1	---	55.3	45.0	50.2	64	37	---	---	---	---	---	---	---	---	---	.85	.19	---	9.6	9.2	---	9.4
August	30.07	30.36	29.57	54.5	59.6	---	63.6	50.3	57.0	79	40	---	---	---	---	---	---	---	---	---	.80	.24	---	7.7	7.6	---	7.6
September	29.73	30.41	28.73	48.2	52.5	---	55.9	44.1	50.0	67	38	---	---	---	---	---	---	---	---	---	5.82	.88	---	8.7	7.4	---	8.0
October	29.32	30.09	28.30	43.5	46.2	---	48.1	38.5	43.3	57	29	---	---	---	---	---	---	---	---	---	7.59	1.50	---	7.7	8.5	---	8.1
November	29.72	30.35	29.07	36.9	39.4	---	41.8	32.7	37.2	53	26	---	---	---	---	---	---	---	---	---	2.35	.72	1.9	6.3	6.9	---	6.6
December	29.62	30.95	28.55	33.4	34.8	---	37.7	28.3	33.0	51	12	---	---	---	---	---	---	---	---	---	7.87	1.84	8.9	6.9	7.6	---	8.1
Year	29.77	30.48	28.99	40.7	44.2	---	46.7	36.9	41.8	79	12	---	---	---	---	---	---	---	---	---	54.60	2.74	22.3	7.5	8.0	---	7.8

FAIRBANKS, ALASKA																											
[φ=64°51' N.; λ=147°39' W.]																											
January	29.69	30.50	28.80	13.9	13.7	14.6	22.5	0.2	11.4	41	-26	8	8	9	77	77	76	0.075	0.072	0.073	6.71	1.84	65.6	7.6	8.0	8.2	8.3
February	29.34	30.19	28.24	-13.1	-5.0	-1.7	0.2	-21.6	-10.7	26	-50	-17	-10	-7	83	77	76	.021	.027	.030	.54	.22	9.6	6.2	7.3	6.9	7.2
March	29.46	29.99	28.64	-1.3	15.0	18.7	20.6	-8.8	5.9	46	-31	-7	2	3	75	55	48	.033	.049	.051	T	T	7.9	5.0	4.2	4.5	4.2
April	29.27	29.99	28.82	18.3	30.2	33.3	35.2	12.4	23.8	45	-11	14	18	17	81	56	48	.082	.096	.093	.42	.18	7.9	5.8	5.9	6.3	6.7
May	29.29	29.81	28.86	34.9	51.2	52.6	54.9	32.2	43.6	67	4	29	27	27	78	40	38	.164	.150	.150	.38	.15	1.0	5.4	5.8	6.1	5.7
June	29.24	29.79	28.71	51.5	68.2	70.4	75.0	48.6	61.8	91	40	44	42	44	78	41	41	.298	.280	.296	.74	.30	0	6.0	5.8	6.0	5.7
July	29.34	29.62	29.04	50.6	66.6	69.6	72.8	47.8	60.3	84	41	46	44	43	84	47	41	.309	.295	.284	1.32	.38	0	5.6	6.3	6.8	6.5
August	29.33	29.65	28.80	46.1	56.3	58.2	60.8	43.1	52.0	75	33	42	42	43	86	61	59	.270	.272	.280	3.83	.59	0	7.5	8.4	8.2	8.2
September	29.36	30.04	28.68	40.9	54.7	56.9	58.7	36.9	47.8	77	25	37	39	38	88	57	52	.225	.236	.230	.34	.22	0	6.5	7.9	7.7	7.4
October	29.17	29.78	28.64	26.5	34.5	37.6	38.8	22.6	30.7	54	4	25	28	28	94	78	69	.140	.154	.155	1.39	.55	4.3	4.4	5.4	5.3	5.5
November	29.38	29.98	28.85	9.8	12.9	14.3	17.2	3.7	10.4	36	-11	5	8	9	82	81	80	.059	.068	.072	.53	.24	9.1	4.0	5.9	5.9	5.7
December	29.56	30.56	28.59	-6.8	-5.7	-4.6	2.8	-17.2	-7.2	35	-40	-12	-11	-10	78	78	77	.029	.030	.033	.28	.09	10.4	3.7	4.2	3.8	4.0
Year	29.37	30.56	28.24	22.6	32.7	35.0	38.3	16.7	27.5	91	-50	18	20	20	82	62	59	.142	.144	.146	16.48	1.84	107.9	5.5	6.3	6.3	6.3

For footnotes, see end of table.

MONTHLY AND ANNUAL SUMMARIES

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TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

BARROW, ALASKA

[H=22 ft.; H_b=13 ft.; h_t=4 ft.; h_r=2 ft.; h_a=27 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., ¹ and 7:30 p. m., ¹ winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temp.	32° temperature or below	Elec-				
																	t	itation	S	now					Thunderstorm	Aurora			
	Average hourly velocity	Prevailing direction	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm			0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more melted	Hail	Light	Dense	32° or below	90° or above	Minimum temperature	Thunderstorm	Aurora	
January	Mi. 14.3	NE.	Mi. 43	NE.	8	5	26	6	9	1	13	0	2	0	14	4	13	4	3	5	4	0	0	31	0	31	0	19	
February	11.1	NE.	42	NE.	3	1	37	1	9	2	6	0	0	0	20	2	6	0	0	1	0	1	28	0	28	0	13		
March	7.8	NE.	26	NE.	0	5	34	2	5	0	10	0	6	0	22	3	6	0	0	1	0	0	1	31	0	31	0	9	
April	10.3	NE.	34	SE.	1	4	22	5	7	1	16	1	4	0	20	2	8	2	2	5	2	0	1	30	0	31	0	4	
May	13.6	NE.	36	NE.	1	0	33	9	7	1	7	1	4	0	4	23	1	1	3	1	0	2	1	23	0	27	0	0	
June	11.9	SW.	30	NE.	0	4	21	7	1	0	19	1	7	0	12	6	12	0	0	1	0	0	4	5	0	19	0	0	
July	16.0	NE.	35	NE.	2	1	49	3	1	0	5	0	3	0	18	6	7	0	0	2	0	0	2	5	0	9	0	0	
August	12.2	SW.	29	NE.	0	5	21	3	5	0	20	2	6	0	7	5	19	3	2	6	2	0	4	8	0	20	0	0	
September	13.6	SW.	40	NE.	3	1	12	4	8	3	24	1	7	0	6	5	19	6	3	6	1	0	2	6	3	25	0	3	
October	13.4	NE.	40	NE.	2	5	35	4	3	7	5	1	2	0	8	5	18	5	5	9	5	0	2	21	0	30	0	12	
November	15.4	NE.	47	NE.	8	1	37	3	11	2	6	0	0	0	12	4	14	4	3	2	2	0	0	26	0	30	0	14	
December	9.9	NE.	29	SW.	0	4	22	6	9	1	16	0	4	0	14	6	11	3	2	8	3	0	0	31	0	31	0	13	
Year	12.5	NE.	47	NE.	28	36	349	53	75	18	147	7	45	0	157	52	156	28	21	48	20	0	18	29	224	0	312	0	87

DUTCH HARBOR, ALASKA

[H=40 ft.; H_b=13 ft.; h_t=4 ft.; h_r=3 ft.; h_a=— ft.]

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FAIRBANKS, ALASKA

[H=440 ft.; H_b=454 ft.; h_t=11 ft.; h_r=61 ft.; h_a=87 ft.]

January	7.4	SW.	34	SW.	5	6	8	6	2	9	17	9	5	0	4	2	25	23	19	26	23	0	6	1	21	0	30	0	4
February	3.4	W.	16	SW.	0	9	4	7	1	10	1	16	5	3	4	9	15	12	4	20	12	0	17	3	28	0	28	0	11
March	4.4	S.	19	S.	0	7	16	3	0	15	5	12	4	0	15	6	10	0	0	8	0	0	3	0	23	0	31	0	12
April	5.9	S.	21	SW.	0	4	6	2	3	23	8	6	8	0	5	10	15	9	3	14	9	0	5	0	7	0	30	0	9
May	6.1	NE.	30	SE.	0	7	9	7	2	13	7	13	4	0	8	10	13	5	4	1	1	0	3	0	0	15	0	1	
June	6.8	S.	28	SE.	0	7	8	5	5	17	8	7	3	0	7	12	11	8	4	0	0	0	3	2	0	2	0	5	0
July	6.1	NE.	30	SW.	0	6	8	3	5	15	8	11	3	3	7	12	12	14	8	0	0	0	1	0	0	0	7	0	0
August	6.3	S.	22	SW.	0	9	11	5	3	17	5	7	4	1	3	4	24	19	18	0	0	1	8	2	0	0	0	1	0
September	5.3	NE.	24	S.	0	6	11	5	3	11	7	8	8	1	2	11	17	7	3	0	0	0	3	0	0	7	0	18	
October	3.8	NE.	15	NE.	0	6	14	6	2	9	8	7	6	4	9	11	11	9	6	8	6	0	14	2	5	0	28	0	19
November	5.1	NE.	23	N.	0	12	12	5	3	8	5	7	8	0	10	8	12	5	3	10	5	0	7	0	27	0	30	0	18
December	5.5	N.	23	S.	0	16	11	5	2	6	3	8	5	6	17	6	8	5	4	7	5	0	10	0	29	0	31	0	15
Year	5.5	S.	34	SW.	5	95	118	59	31	153	82	111	63	18	91	101	173	116	76	94	61	1	80	10	140	2	230	12	108

For footnotes, see end of table.

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

JUNEAU, ALASKA

[$\phi=58^{\circ}18' N.$; $\lambda=134^{\circ}24' W.$]

Month	Pressure			Temperature							Moisture																
	Monthly mean ²	Extremes		Mean					Extremes		Dew point		Relative humidity		Vapor pressure			Precipitation		Cloudiness							
		Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	Maximum	Minimum	Monthly	Maximum	Minimum	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	7:30 a. m.	Noon, local time	7:30 p. m.	Total	Maximum in 24 hours	Total snow/fall un-melted	7:30 a. m.	Noon, local time	7:30 p. m.	Daylight
<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	°	°	°	°
January	30.13	30.73	29.48	27.2	28.8	28.5	31.9	23.6	27.8	41	13	18	19	19	71	69	69	0.110	0.115	0.113	5.57	1.41	21.6	5.5	7.5	7.2	7.2
February	29.61	30.23	28.74	28.4	30.9	31.0	32.8	25.9	29.4	45	10	20	19	20	72	63	63	.118	.115	.115	3.75	.59	54.3	7.5	7.5	8.0	7.9
March	29.74	30.22	29.28	35.7	40.7	41.3	43.0	32.9	38.0	54	27	30	28	28	80	64	61	.166	.156	.152	6.14	1.36	14.8	7.3	8.3	8.1	8.4
April	29.64	30.11	29.16	37.7	43.5	44.2	45.9	35.3	40.6	54	32	31	29	29	78	59	58	.176	.163	.164	5.79	1.24	7.2	8.2	8.5	8.2	8.4
May	29.86	30.25	29.17	42.7	50.4	51.5	53.2	40.8	47.0	64	34	38	36	36	85	60	58	.232	.214	.213	5.82	.94	.0	9.4	9.3	9.1	9.2
June	29.85	30.49	29.27	49.1	59.3	61.5	63.6	47.8	55.7	83	43	44	44	43	84	60	55	.294	.289	.278	4.76	1.74	.0	6.5	6.8	6.6	6.7
July	29.96	30.16	29.64	51.3	57.7	58.5	60.1	50.1	55.1	72	44	48	48	48	88	71	70	.334	.332	.332	8.15	2.40	.0	8.7	9.3	9.5	9.2
August	29.84	30.11	29.31	50.4	57.4	58.3	60.1	49.0	54.6	75	44	48	48	47	91	72	70	.332	.331	.327	11.63	2.27	.0	8.2	7.6	7.9	7.8
September	29.94	30.24	29.55	50.5	54.4	56.0	57.6	47.8	52.7	75	38	45	45	45	84	75	71	.307	.306	.307	9.92	1.60	.0	6.7	8.0	7.8	8.0
October	29.69	30.15	29.04	46.5	48.5	48.5	51.9	42.8	47.4	62	34	41	41	41	83	77	79	.263	.261	.266	14.80	2.65	.0	8.2	8.8	8.9	8.8
November	29.69	30.11	28.81	36.7	38.7	38.1	41.6	32.8	37.2	54	18	26	26	26	66	62	65	.147	.149	.149	6.45	1.57	11.5	6.2	7.0	6.9	6.9
December	29.78	30.69	29.10	26.2	26.5	26.0	30.1	21.9	26.0	49	—1	16	17	16	67	68	68	.115	.116	.116	7.03	3.19	20.4	5.9	7.1	7.1	7.2
Year	29.81	30.73	28.74	40.2	44.7	45.3	47.6	37.6	42.6	83	—1	34	33	33	79	67	66	.216	.212	.211	89.81	3.19	129.8	7.4	8.0	7.9	8.0

KODIAK, ALASKA

[$\phi=57^{\circ}48' N.$; $\lambda=152^{\circ}24' W.$]

January	30.09	30.64	29.50	36.9	—	40.5	43.6	33.0	38.3	50	24	—	—	—	—	—	—	—	0.92	0.63	0.0	4.6	—	6.7	6.4
February	29.46	30.14	28.32	25.8	—	32.9	36.0	22.4	29.2	49	2	—	—	—	—	—	—	—	1.06	.59	12.4	3.6	—	4.2	4.2
March	29.55	30.04	29.01	29.3	—	37.1	39.2	27.5	33.4	45	16	—	—	—	—	—	—	—	0.51	.21	.5	5.1	—	6.3	6.2
April	29.50	30.25	28.95	34.3	—	42.6	45.4	32.3	38.8	57	22	—	—	—	—	—	—	—	1.97	.55	.5	4.9	—	7.2	6.8
May	29.55	30.18	29.18	38.6	—	44.0	47.2	37.1	42.2	54	29	—	—	—	—	—	—	—	8.32	2.58	.7	8.2	—	8.8	8.5
June	29.63	30.19	28.73	44.0	—	49.5	53.0	42.5	47.8	70	38	—	—	—	—	—	—	—	6.94	1.68	.0	8.6	—	8.8	8.7
July	29.70	30.02	29.13	48.4	—	54.2	57.1	46.8	52.0	71	41	—	—	—	—	—	—	—	9.76	3.18	.0	8.5	—	8.6	8.6
August	29.74	30.07	29.30	52.6	—	60.5	64.7	49.6	57.2	72	40	—	—	—	—	—	—	—	.89	.48	.0	6.3	—	7.1	6.5
September	29.65	30.28	28.78	47.8	—	54.4	56.3	45.6	51.0	69	37	—	—	—	—	—	—	—	6.60	1.40	.0	6.4	—	6.6	6.6
October	29.26	29.86	28.59	44.8	—	48.2	50.2	42.7	46.4	61	34	—	—	—	—	—	—	—	13.73	3.07	.0	8.6	—	8.6	9.0
November	29.45	29.99	28.78	35.5	—	39.7	41.8	32.7	37.2	49	24	—	—	—	—	—	—	—	6.28	2.59	.9	5.5	—	7.1	7.2
December	29.46	30.87	28.42	31.4	—	33.6	36.3	28.1	32.2	45	12	—	—	—	—	—	—	—	6.98	1.16	29.5	6.7	—	6.7	7.1
Year	29.59	30.21	28.89	39.1	—	44.8	47.6	36.7	42.1	72	2	—	—	—	—	—	—	—	63.96	3.18	43.8	6.4	—	7.2	7.2

NOME, ALASKA

[$\phi=64^{\circ}30' N.$; $\lambda=165^{\circ}24' W.$]

January	30.03	30.97	28.80	19.0	—	20.2	26.6	11.1	18.8	34	—18	16	—	17	89	—	86	0.099	—	0.101	4.47	0.69	43.2	7.4	—	8.7	8.5
February	29.81	30.58	29.14	1.3	—	4.6	7.5	—5.5	1.0	32	—28	—3	—	0	80	—	78	.042	—	.047	.70	.22	7.5	6.3	—	7.3	7.3
March	30.01	30.81	28.98	0.8	—	10.4	13.0	—5.7	3.6	34	—30	0	—	2	78	—	66	.045	—	.053	.40	.18	4.8	2.9	—	3.3	3.5
April	29.84	30.40	29.28	12.5	—	23.1	24.9	7.7	16.3	35	—12	6	—	14	74	—	66	.062	—	.088	1.06	.91	7.1	5.4	—	5.6	6.0
May	29.79	30.17	29.42	27.7	—	36.0	38.8	23.5	31.2	51	4	20	—	26	70	—	65	.110	—	.138	.86	.63	11.0	4.6	—	5.5	5.6
June	29.77	30.08	29.28	43.3	—	50.0	55.1	38.4	46.8	78	26	38	—	41	83	—	73	.233	—	.263	.56	.46	.0	5.9	—	6.3	6.2
July	29.81	30.10	29.53	49.3	—	57.7	60.5	45.4	53.0	72	33	46	—	48	88	—	72	.306	—	.345	.90	.54	.0	7.3	—	7.2	6.9
August	29.82	30.17	29.47	46.8	—	54.3	55.8	42.5	49.2	70	32	44	—	45	86	—	73	.279	—	.305	2.98	1.02	.0	7.3	—	7.1	7.2
September	29.79	30.50	29.18	41.4	—	48.2	49.9	37.6	43.8	59	22	37	—	41	86	—	78	.231	—	.262	5.38	1.15	.0	6.1	—	8.0	7.7
October	29.67	30.26	29.05	31.5	—	39.5	40.5	26.5	33.5	58	16	26	—	30	79	—	67	.144	—	.165	1.00	.72	.7	5.0	—	5.5	5.5
November	29.79	30.58	28.96	25.1	—	27.5	30.3	18.9	24.6	40	3	20	—	21	80	—	77	.116	—	.121	2.02	1.14	3.5	4.9	—	5.7	5.5
December	30.07	31.20	29.02	13.3	—	15.1	20.5	5.3	12.9	39	—15	6	—	8	70	—	71	.060	—	.065	.33	.19	3.2	3.1	—	5.0	4.0
Year	29.85	31.20	28.80	26.0	—	32.2	35.3	20.5	27.9	78	—30	21	—	24	80	—	73	.144	—	.163	20.66	1.15	81.0	5.5	—	6.3	6.2

For footnotes, see end of table.

TABLE 15.—Annual meteorological summaries for the year ended Dec. 31, 1937—Continued

JUNEAU, ALASKA

[H=72 ft.; H_b=80 ft.; h_t=96 ft.; h_r=88 ft.; h_a=116 ft.]

Month	Wind													Number of days															
	By self-register					Number of times, 7:30 a. m., and 7:30 p. m., winds observed from								Clear	Partly cloudy	Cloudy	Precipitation		Snow		Fog		Maximum temp.		32° or below	Elec- tricity			
	Average hourly ve- locity	Prevaling direc- tion	Maximum velocity	Direction at time of maximum velocity	Days with 32 miles or over	North	Northeast	East	Southeast	South	Southwest	West	Northwest				Calm	0.01 inch or over	0.04 inch or over	T or more	0.01 inch or more meted	Hail	Light	Dense			32° or below	90° or above	Minimum temperature 32° or below
January	7.5	S.	35	NE.	4	2	15	6	9	9	1	12	4	4	7	3	21	17	13	16	13	0	2	0	15	0	28	0	4
February	9.3	S.	46	NE.	4	1	9	6	12	18	2	5	3	0	4	3	21	18	17	20	17	0	0	0	12	0	23	0	3
March	6.5	S.	24	E.	0	0	6	5	16	12	4	15	1	3	4	2	25	20	17	13	8	0	0	0	0	0	12	0	1
April	8.4	S.	36	NE.	2	0	5	4	18	19	1	5	6	2	3	3	24	24	19	11	5	0	0	0	0	0	1	0	0
May	7.0	S.	24	SE.	0	2	3	4	19	16	3	9	2	4	0	2	29	23	19	0	0	0	0	0	0	0	0	0	0
June	5.2	S.	29	SE.	0	0	4	2	7	25	5	4	2	11	8	5	17	19	14	0	1	0	0	0	0	0	1	1	
July	6.2	S.	20	E.	0	0	1	3	14	22	1	8	3	10	0	4	27	23	20	0	0	2	1	0	0	0	0	0	
August	6.7	S.	28	SE.	0	0	0	2	13	23	1	13	1	9	6	2	23	26	18	0	0	1	0	0	0	0	0	2	
September	7.1	S.	39	NE.	2	0	4	2	11	28	1	7	1	6	3	5	22	20	17	0	0	4	1	0	0	0	0	2	
October	7.7	S.	33	SE.	2	0	4	8	16	16	4	11	1	2	2	3	26	25	21	0	0	6	0	0	0	0	1	4	
November	9.1	S.	32	NE.	1	2	15	4	11	10	4	9	1	4	8	2	20	15	14	10	8	0	0	0	3	0	14	0	
December	9.4	NE.	31	NE.	0	2	18	3	8	12	0	9	7	3	8	1	22	18	16	15	9	0	0	0	13	0	23	0	
Year	7.5	S.	46	NE.	12	9	84	49	154	210	27	107	32	58	53	35	277	248	205	85	60	1	15	2	43	0	101	2	29

KODIAK, ALASKA

[H=147 ft.; H_b=15 ft.; h_t=5 ft.; h_r=4 ft.; h_a=—ft.]

January	10.7	SW.	48	SW.	2	0	1	0	5	6	13	3	12	22	7	11	13	6	5	0	0	0	1	0	1
February	9.8	NW.	47	NW.	5	3	3	1	2	6	11	5	24	1	14	7	7	5	4	9	5	0	0	0	1
March	7.0	NW.	23	NW.	0	7	2	4	6	3	7	2	31	0	8	10	13	6	5	12	2	0	2	0	2
April	8.9	NW.	43	SW.	2	4	7	2	5	5	10	7	20	0	6	9	15	12	9	12	1	1	0	0	0
May	7.2	NE.	33	SE.	1	2	26	10	6	2	2	2	12	0	1	6	24	24	22	1	0	0	7	0	0
June	6.8	NE.	21	SE.	0	5	25	4	16	1	2	2	2	3	0	7	23	21	16	0	0	0	12	6	0
July	6.4	NE.	20	SE.	0	4	18	3	18	3	3	1	12	0	3	2	26	22	20	0	0	0	7	11	0
August	7.0	SW.	34	NW.	5	7	3	7	5	5	15	7	12	1	5	14	12	10	5	0	0	0	0	0	0
September	7.8	SE.	26	SE.	0	5	11	5	18	4	8	3	6	0	9	5	16	13	13	0	0	0	4	2	0
October	7.4	NE.	28	NE.	1	5	26	8	7	1	3	1	10	1	0	6	25	25	22	0	0	1	9	1	0
November	7.1	NW.	34	W.	3	2	5	0	6	9	11	2	24	1	6	5	19	17	11	9	4	0	0	0	2
December	10.3	NW.	33	NW.	5	2	11	0	10	3	2	3	31	0	8	3	20	20	7	12	10	0	3	0	0
Year	8.0	NW.	48	SW.	24	46	138	44	104	48	87	38	196	29	67	85	213	181	139	55	22	2	45	20	18

NOME, ALASKA

[H=22 ft.; H_b=22 ft.; h_t=5 ft.; h_r=2 ft.; h_a=32 ft.]

January	12.6	NE.	38	NW.	5	5	18	10	5	5	5	6	6	2	2	5	24	24	21	26	23	0	17	5	28	0	31	0	2
February	6.2	NE.	25	NE.	0	3	22	14	3	1	2	4	3	4	6	4	18	14	7	19	14	0	10	1	27	0	28	0	7
March	5.7	NE.	25	NE.	0	11	18	8	1	0	0	3	13	8	20	3	8	8	2	8	8	0	8	2	30	0	31	0	12
April	8.3	N.	42	N.	2	10	10	6	2	0	10	7	11	4	9	8	13	9	6	14	9	0	7	1	22	0	30	0	6
May	7.1	NE.	28	N.	0	10	18	7	3	8	6	3	7	0	6	17	8	8	4	9	6	0	6	2	6	0	23	0	0
June	7.0	W.	25	N.	0	13	4	2	7	4	13	13	3	1	6	12	12	5	3	0	0	0	10	5	0	0	3	3	0
July	7.4	SW.	24	E.	0	7	9	5	11	8	12	7	2	1	5	10	16	8	4	0	0	0	6	3	0	0	0	2	0
August	9.9	SW.	26	N.	0	5	8	1	10	5	14	8	11	0	5	8	18	20	14	0	0	0	9	0	0	0	1	0	0
September	8.6	N.	28	N.	0	16	9	10	6	6	6	1	6	0	3	7	20	17	13	0	0	0	11	1	0	0	6	0	6
October	7.8	N.	26	NE.	0	24	17	7	1	2	3	3	3	2	11	8	12	6	4	5	1	0	3	0	3	0	25	0	8
November	9.1	NE.	34	SE.	3	11	20	4	8	5	2	1	7	2	11	5	14	9	7	14	6	0	2	0	16	0	27	0	9
December	9.9	NE.	43	N.	5	18	24	7	0	1	3	3	5	1	14	4	13	6	3	9	6	0	1	0	26	0	31	0	12
Year	8.3	NE.	43	N.	15	133	177	81	57	45	76	59	77	25	98	91	176	134	88	104	73	0	90	20	158	0	236	5	62

¹ Hours at Dutch Harbor, 12 a. m. and 12 p. m., 165th meridian time; at Barrow, Fairbanks, and Kodiak, 2 a. m. and 2 p. m., 150th meridian time; at Nome 1 a. m. and 1 p. m., 165th meridian time.

² No diurnal correction applied.

³ By eye observation.



DEPARTURE FROM NORMAL TEMPERATURE, IN DEGREES FAHRENHEIT, FOR THE CROP SEASON OF 1937, MARCH 1 TO SEPTEMBER 30
Shaded portions show excess (+) and unshaded portions deficiency (-) of temperature. Figures show mean daily excess (+) or deficiency (-) of temperature over areas bounded by light lines



TOTAL PRECIPITATION, INCHES, FOR THE YEAR 1937

1937.

GPO B-2492

